1968

The Prenience of the Kutenai Indians: A Preliminary Delineation of Cross-Culturally Comparative Traits

Roger P. Tro
The University of Montana

THE PROVENIENCE OF THE KUTENAI INDIANS: A PRELIMINARY DELINEATION OF CROSS-CULTURALLY COMPARATIVE TRAITS

by

Roger P. Tro

B.A., University of Montana, 1967

Presented in partial fulfillment of the requirements for the degree of

Master of Arts

UNIVERSITY OF MONTANA

1968

Approved by:

Lee C. Taylor
Chairman, Board of Examiners

Fred S. Hurshall
Dean, Graduate School

June 4, 1968
Date

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

2444-ST

ACKNOWLEDGEMENTS

I should like to express my gratitude to the many individuals who aided me in the preparation of this thesis. Dr. D.C. Taylor, Dr. C.I. Malouf, and Mr. James Polsin, the members of my examining committee, are to be especially thanked for their critical review and editing of the manuscript. I should also like to thank Dr. Claude Schaeffer for his generousity in allowing me to use data collected from informants Ambrose Gravelle and Joe Dennis to whom thanks are also offered. L.L. Loendorf, my Field Supervisor during the Kootenai River Basin Archaeological Survey, for his instruction and invaluable help, Don Dodge, for his photographic assistance, and Dale Fredlund who aided in the construction of maps, are to be expressly thanked. Fellow graduate students Dick Malouf and Mike Wilkerson aided me greatly in discussing the study and in lending moral support. I am most grateful to my wife, Louise, and children for their patience during the many trying hours spent in the completion of this work.

TABLE OF CONTENTS

LIST OF TABLES

Table

LIST OF ILLUSTRATIONS

CHAPTER I

INTRODUCTION

Basic to the understanding of a particular culture is the possession of information concerning its historical development, endogenic or evolutionary development, and the functioning of particular traits and complexes within the culture. In the case of the Kutenai Indians of Northwestern Montana, Northern Idaho, and Southeastern British Columbia, almost nothing is known of their history prior to white contact. As a result, Kutenai ethnology is severely limited as far as interpretation and comprehension of Kutenai cultural phenomena is concerned. While their culture is easily described, it is extremely difficult to attempt generalization on a higher level of abstraction.

In an attempt to resolve this discrepancy many scholars that have worked with the Kutenai have compared the relationships and similarities of their culture with other North American Indian groups. Certain aspects of Kutenai culture have been shown to be similar to cultures of the Columbia Plateau, the Great Plains, the Northwest Coast, North Central Canada, the Great Basin, the Northeast Woodlands, and even to the Eskimo. Their language and several other cultural phenomena, however, appear to be unique to the Kutenai. As a result of their cultural eclecticism and their provocative linguistic isolation, various postulates as to the provenience, or original home, of the Kutenai have been proferred by various investigators.

The geographic area from which the Kutenai originally emerged as

an identifiable group is the problem that I investigate in this thesis. If this can be determined, ethnological studies of the Kutenai will be more significant than is presently possible. I will attempt to further illuminate the question of the provenience of the Kutenai Indians by applying to it the results of the Kootenai River Basin Archaeological Survey. This investigation has been conducted in the area last known to have been occupied by the Kutenai before white intrusion and which is believed by the majority of Kutenai informants to have been their area of origin.

To provide a meaning to the study I have formulated an hypothesis to which I will apply the data under consideration. I shall proceed with the assumption that the Kutenai Indians are a tribe of the Columbia Plateau who developed politically as such some distance to the north and west of their present locale. I shall further assume that hints of cultural relationships to the Great Plains are only a veneer stemming from recent historic contacts with present Plains tribes and from brief periods of residence on the Plains during the pre-horse period. Both archaeological and ethnographic data will be used to test the hypothesis that the aboriginal Kutenai are a Columbia Plateau and not a Great Plains tribe.

There are several approaches that may be used to study a problem of this nature. Ethnographic comparisons, linguistic analysis, and investigation of archaeological data would appear to offer the most potential. This work will concern itself primarily with archaeology although a preliminary attempt at comparing Kutenai ethnographic data with that of other cultures will also be undertaken. Ethnographic data, however,

is presented primarily to be related to the archaeological data.

I feel two contributions to anthropological knowledge will result from this thesis: the archaeological data recovered during the Kootenai River Basin Archaeological Survey will be reported; and preliminary archaeological and ethnographic cross-cultural comparisons will be made in an attempt to gain further information concerning the question of the provenience of the Kutenai.

The thesis is organized in such a manner as to first report the descriptive archaeological and ethnographic data. In the final chapter an attempt will be made to synthesize this information. From this it may be possible to postulate certain criteria that would give evidence to a particular archaeological site having been occupied by the Kutenai Indians. Comparisons of archaeological data will then be attempted to other areas surrounding the Kootenai River with the objective of finding similarities or dissimilarities between the artifact collections. The results of these comparisons will be used to test the hypothesis. I will assume that areas in which cultural similarities are most evident are areas from which the Kutenai may have emerged. If relationships are particularly strong, I will suggest that intensive cross-cultural research be carried out in these areas.

While the earlier chapters will be primarily descriptive, and while it is considered beyond the scope of this thesis to attempt detailed cross-cultural comparisons of ethnographic data, where there is readily available comparative data or where a particular literary source deals directly with the problem, I will attempt some superficial comparisons. Any indications as to provenience resulting from these cursory comparisons will be noted as hints to areas in which more

comparative work should be done.

Material is presented in such a manner as to give the reader a complete picture of Kutenai culture. Chapters dealing with ethnography, therefore, will contain some information not directly pertinant to the archaeology but which is felt to be essential in the presentation of the particular cultural aspect. This serves to render the stable archaeological data a bit more dynamic and allows a lifeway to be more easily perceived.

The first chapter will describe all the archaeological sites located within the survey area. An analysis of artifacts collected is also presented. This chapter is followed by a discussion of Kutenai material culture which provides a transition from the archaeological to the ethnographic data and gives the reader some idea concerning this aspect of Kutenai life. Much of this material is relevant to the interpretation section of the final chapter. Similarly, Chapter IV, Subsistence and Environment, is quite relevant to the final discussion. Some ethnographic comparative material is included within this chapter. A lesser amount of the data in Chapter V, dealing with social organization, is archaeologically relevant. The chapter is necessary, however, as this is one of the more readily comparable aspects of culture. Data concerning Kutenai religious practices follows in which both archaeological and comparative material is discussed. The final ethnographic chapter deals with Kutenai mythology. A relatively large amount of material bearing directly on the problem of this thesis and on the hypothesis is analyzed.

Ethnographic data appearing in this study is largely the result

of a fairly extensive survey of pertinant available literature dealing with the Kutenai Indians. Whenever possible I have emphasized data that appears in those works which attempt to recreate the prehistoric culture of the Kutenai. Anthropological literature, as it is more apt to be the result of scientific investigation, is given precedence over historical or popular sources. A small amount of the ethnographic data was collected from two Kutenai informants, Ambrose Gravelle and Joe Dennis. I conducted only a few brief interviews with these informants, thus the material is used only in a supplementary manner.

Wherever the Kutenai were originally located, there is little doubt that they resided in their present locale before any white contact. Peter Fidler recorded a map drawn for him by a Blackfoot chief, The Feathers, before 1801 in which the Kutenai were described as living directly west of the Rocky Mountains in their present habitat (American Heritage Book of Indians 1961:324). Since the first contact beleived to have taken place between the Kutenai and the white man occured some time after this date (Schaeffer 1966b), early historical works have been used only in the absence of anthropological literature and to obtain descriptive data.

Of the many problems encountered in the development of this thesis, the most pervasive was the state of available literature. There have been relatively few published anthropological works about the Kutenai. Some of these cannot be considered entirely reliable. When viewed collectively the literature dealing with the Kutenai is seen to be replete with contradiction and confusion. For example, Jenness (1955) and Baker (1955), in their discussions of Kutenai physical characteris-

tics, state that the Kutenai are taller than members of surrounding tribes. Edward Curtis (1911) feels they were shorter than their neighbors. The name Kutenai, according to Baker (1955:8) is a derisive term of Blackfeet origin meaning "big belly". Clara Graham (1945:2) believes the tribal name is of Athabaskan origin signifying "water people". This same possibility is suggested by Hoffman (1886: 371), although he feels this is a Flathead rather than Athabaskan appelation. Frank Linderman notes that Kutenai is a self-applied name denoting "Flatbow People" (1926:v). Some substantiation of this may come from Merk (1931:169) who notes one of the tribes in the area of the Kootenai River as the Arcduplatte, French for Flatbow. These are but a few examples of the problems one encounters in the publications regarding the Kutenai Indians, but they may give some idea as to the state of the available literature.

Although the existing literature is to a large extent inadequate, it is doubtful that further ethnographic field work would be able to solve many of the problems. The Kutenai today are very highly acculturated. Most of these Indians would have difficulty in reconstructing their prehistoric lifeway. Those who are familiar with past cultural practices are aware of those adopted by the Kutenai during the period immediately before white domination. These practices could differ vastly from those in the prehistoric period. Before and at the beginning of the 1800s neighboring tribes had a great deal of contact with the Kutenai and likely brought about many changes in their culture. During this period even their traditional enemies, the Blackfeet, joined with the Kutenai to hunt buffalo (Chamberlain 1897:793). Inter-tribal contacts also occured more frequently as emphasis began to be placed on

securing fur bearing animals to trade with the white man for European goods.

When those informants used by most authorities were specifically asked questions about where their tribe had originated they agreed almost unanimously that the Kutenai had always occupied the area around the Kootenai River. This is also the feeling of Ambrose Gravelle and Joe Dennis. Those informants who do not agree to a Kutenai provenience in this area generally offer alternatives for which there is little supporting evidence.

There are two principal theories concerning the provenience of the Kutenai Indians: that they were a tribe of the Columbia Plateau originally inhabiting an area to the west of their present locale; or that they were a tribe residing on the Northern Great Plains and were forced westward over the Continental Divide by more warlike tribes migrating onto the Plains. There is cultural evidence to support either of these hypotheses. Various aspects of material culture, social organization, religious and ceremonial practices, etc. can be traced to one or both of these areas. Many investigators such as Chamberlain, Graham, Hodge, Jenness, and Lewis feel that the Kutenai had been driven west in the eighteenth century by the Blackfeet. This idea is contradicted by Curtis' statement that the Kutenai lived west of the Rockies long before the Blackfeet reached the Plains (1911:118). Baker (1955:6), on this point, agrees with Curtis, although he postulates that the original provenience of the Kutenai was to the northwest of their present locale. Turney-High, who has thus far produced the most complete publication about the Kutenai, disagrees with all of the above noting "...the best information boils down to not only an eastern provenience

for the Kutenai but even a trans-Rocky Mountain one...(1941:7)". Malouf (1967:2,3) is the most specific in his description of the prehistoric habitat of the Kutenai. He locates three major population centers one of which is east of the Continental Divide near the present site of McLeod, Alberta. This center is the home of the group sometimes referred to as the Plains Kutenai. Perhaps the most widely accepted theory of a Western Columbia Plateau origin for the Kutenai comes from Swadesh (1949:161). He feels they were living in the extreme west of the Plateau until forced eastward by Salishan speakers migrating in that direction.

Those who propose an eastern provenience for the Kutenai find support in the presence on the Plains of a tribe, or band, of Indians known as the Tunaxe. Many of the maps which show the location of North American tribes in aboriginal times include only one group east of the Rocky Mountains in the present state of Montana. This is the Tunaxe (LaFarge 1956:68). That the Tunaxe resided on the Plains is well reported. Their identity, however, is indeed questionable. James Teit in "The Salishan Tribes of the Western Plateau" (1930a) refers to the Tunaxe as a Salishan speaking tribe residing in Central Montana, east of the Rockies. Most authorities believe that this group was decimated by a smallpox epidemic and Blackfeet raids, the survivors migrating west to join the Kutenai, Flathead, and other tribes. That these Tunaxe were Salishan speakers is attested to only by Teit's Salish informants and Curtis (1911:119).

Boas, who edited Teit's work says Tunaxe is synonomous with Kutenai and is in fact the word applied by the Kutenai to themselves. Teit's work also brings out the fact that the Tunaxe were unable to

speak to any other Salishan speaking tribes. To further complicate matters, Teit claims that the Salish Tunaxe lived directly south of a band of Kutenai who also called themselves Tunaxe. Turney-High believes Teit to be incorrect in ascribing a Salishan language to the Tunaxe. He feels they were definitely a Kutenai band living east of the mountains. One of his informants told him that the Tunaxe were the original Kutenai who then lived on the Plains and later for an undetermined reason, split into two groups, one moving west to become the present Kutenai, the other remaining on the Plains to become the Piegan tribe of the Blackfeet (1941:11-13). This appears to be quite unlikely as the Kutenai and the Piegan speak different languages. Turney-High mentions this only because he interpreted Sapir's classification of the Kutenai language into the Algonquian-Wakashan phylum as indicating a linguistic relationship to the Blackfeet. We now know that this is not so (Voegelin 1965).

Teit, in an article published in American Anthropologist the same year as his other work, states that the Tunaxe referred to as Kutenai by the Kutenai, and those referred to as Salish by the Salish constitute two different groups who, due to numerous inter-tribal relationships, became confused in the eyes of those viewing them from a distance (1930b: 628).

The question of the identity of the Tunaxe may never be resolved as there are no longer informants old enough to add any information. That there was a band of Kutenai called Tunaxe, and that they at one time resided on the Plains is well established. However while this may be considered evidence to support a theory in favor of a Plains provenience for the Kutenai it may be seen in a different light. The fact that the

Kutenai made annual trips to the Plains to hunt buffalo and that when they did so it was a tribal affair which involved carrying many of their possessions and entailed the establishment of a relatively complete camp is sufficient evidence to explain the presence of the Kutenai on the Plains. As mobil as were the Plains Indians, it is unlikely that any group would have had much more contact with another Plains group than they would have had with the Kutenai when present to hunt buffalo. Possibly the accessibility of the buffalo on the Plains would have motivated some Kutenai to take up residence there. This would appear to be a more plausible explanation of the Tunaxe as a Kutenai group on the Plains than to explain them as a remnant of the original Kutenai tribe that once resided on the Plains. According to Malouf (1967:4) the Tunaxe were simply a band of the Peud d'Oreille living on the Plains and south of some Kutenai bands that were in this area.

Examinations along these lines, while interesting, and at times illuminative, generally result in little more than speculation. Therefore, in the remainder of this thesis we will turn to a more scientific approach to the question of the provenience of the Kutenai.

CHAPTER II

THE ARCHAEOLOGY OF THE KOOTENAI RIVER

The Kootenai River Basin Archaeological Survey was conducted under a National Park Service Research Grant awarded to Doctor Dee C. Taylor upon commencement of construction activities of Libby Dam. This structure will cause a large portion of the Kootenai River Valley to be flooded. The pool area from the Canadian border south to the site of Libby Dam was investigated by the survey crew. The summers of 1966 and 1967 were spent in an attempt to locate sites and salvage archaeological remains prior to their inundation as a result of the dam. The first summer in the field was primarily used to survey the pool area in an attempt to locate as many archaeological sites as possible. Some of the sites found were test pitted and there were limited excavation activities near the termination of the first field session. The second summer in the field was devoted almost entirely to excavation on an intensive level.

A total of twenty seven sites were located and numbered by the survey crew. Numbering of sites followed the procedure delineated by the Smithsonian River Basin Surveys in which 24 indicates the state, Montana, LN the county, Lincoln, and the final number is the official number given to the particular site in question.

The following site reports will be given in numerical order except where there is a relationship between two sites not consecutively numbered.

24LN501 Jackson Creek

Site 24LN501 is located approximately twenty miles north of Libby, Montana, adjacent to the west side of Montana Highway 37 and directly north of Jackson Creek. The Kootenai River flows about one quarter mile to the east. The elevation of the site is approximately forty feet higher than that of the river terrace. All evidence of occupation occurs on flat ground , one hundred and fifty yards from the east edge of the terrace and one third of a mile from the next ascending terrace to the west. The terrace on which the site is located continues for several miles to the north and south. We found cultural debris only in the Southeast Quarter of Section 9, Township 31 North, Range 27 West.

The bulk of material recovered from 24LN501 was found to the immediate west of the highway and north of the creek where the ground cover had been disrupted by logging operations. Fire cracked rock, burned bone, charcoal, and chipping detritus was distributed over an area of about three hundred square yards. The concentration of deposits was quite sparse.

Jackson Creek, the southern border of the site, is a small shallow, rather fast flowing stream. It has an average width of four feet in the area of the site. During normal climatic conditions it flows the entire year.

Where ground cover still exists within the occupation area it is primarily of Oregon grape or kinnekinic plants. Those trees still standing are coniferous. The consistency of the soil is hard and rocky.

Only one half day of surface survey was devoted to 24LN501 as it was felt that the sparse distribution did not justify further work.

One projectile point, SCal*, of a dark gray chalcedony was recovered from the site. One unifacially worked basalt flake and several chips comprised the remainder of cultural material salvaged. Possibly a fire hearth existed near the creek but if so it had been disturbed. Fire cracked rock, fragments of deer bone, and bits of charcoal were so scattered that we were unable to see any form.

24LN502 Jealous Lover

The Jealous Lover site is located approximately one half mile north of the small community of Whispering Pine on the west bank of the Kootenai River. It can be approached by a dirt road that leaves Montana Highway 37 just before the first sharp curve north of Whispering Pine. The site's elevation is only five or six feet above the river at high water. The flat terrace on which the site exists extends westward for two hundred and fifty yards to the steep forty foot high slopes of the next terrace, and several miles to the north and south. 24LN502 is in the Northwest Quarter of Section 18, Township 32 North, Range 28 West.

The area from which the majority of material was recovered is a cleared field of approximately twenty acres which contained a ranch house, barn, and other buildings. Cultural debris extended from the river bank westward onto the field for at least a hundred feet and extended north from the ranch buildings about two hundred yards to the end of the cleared field. The field had been plowed about twenty years prior to the survey and is presently covered with wild grasses. The

---

* This code refers to a specific shape in our taxonomic system, see section immediately following site reports.

edge of the river bank, although mostly bare of vegetation, has a sparse growth of alder bushes, willows, and pines. The soil cover is a very fine river deposited sand that extends down at least six feet.

Most artifacts recovered through survey were found along the edge of the river bank at an average depth of two feet below the surface. Very little material came directly from the surface except where gophers had been digging.

After a short surface survey was conducted it was decided that the site warranted testing. While there was little surface material on the field, the edge of the river bank was replete with fire cracked rock, charcoal, and burned and split bone. There our crew found several artifacts and numerous flakes and chips. The first test pit was dug about twenty yards south of the northeast periphery of the site. There part of the river bank had collapsed revealing a dense concentration of fire cracked rock and bone. We found a scraper three feet from the center of this concentration. This area appeared to offer a potentially good cultural yield and was yet sufficiently peripheral to not disturb what appeared to be the center of the site. The test pit was commenced at this point.

A five by five grid, oriented north, was laid out with its eastern edge directly on the river bank. The sandy soil permitted us to do all excavation work with trowels. We proceeded from the river bank west for five feet advancing a vertical face eighteen inches high. The vertical river bank showed no evidence of human occupation below the top eighteen inches.

Few objects of lithic construction were recovered from the pit. One partial projectile point was found while screening the spall dirt,

several flakes were also recovered. The pit produced nine hundred and sixty nine pieces of fire cracked rock and innumerable fragments of bone.

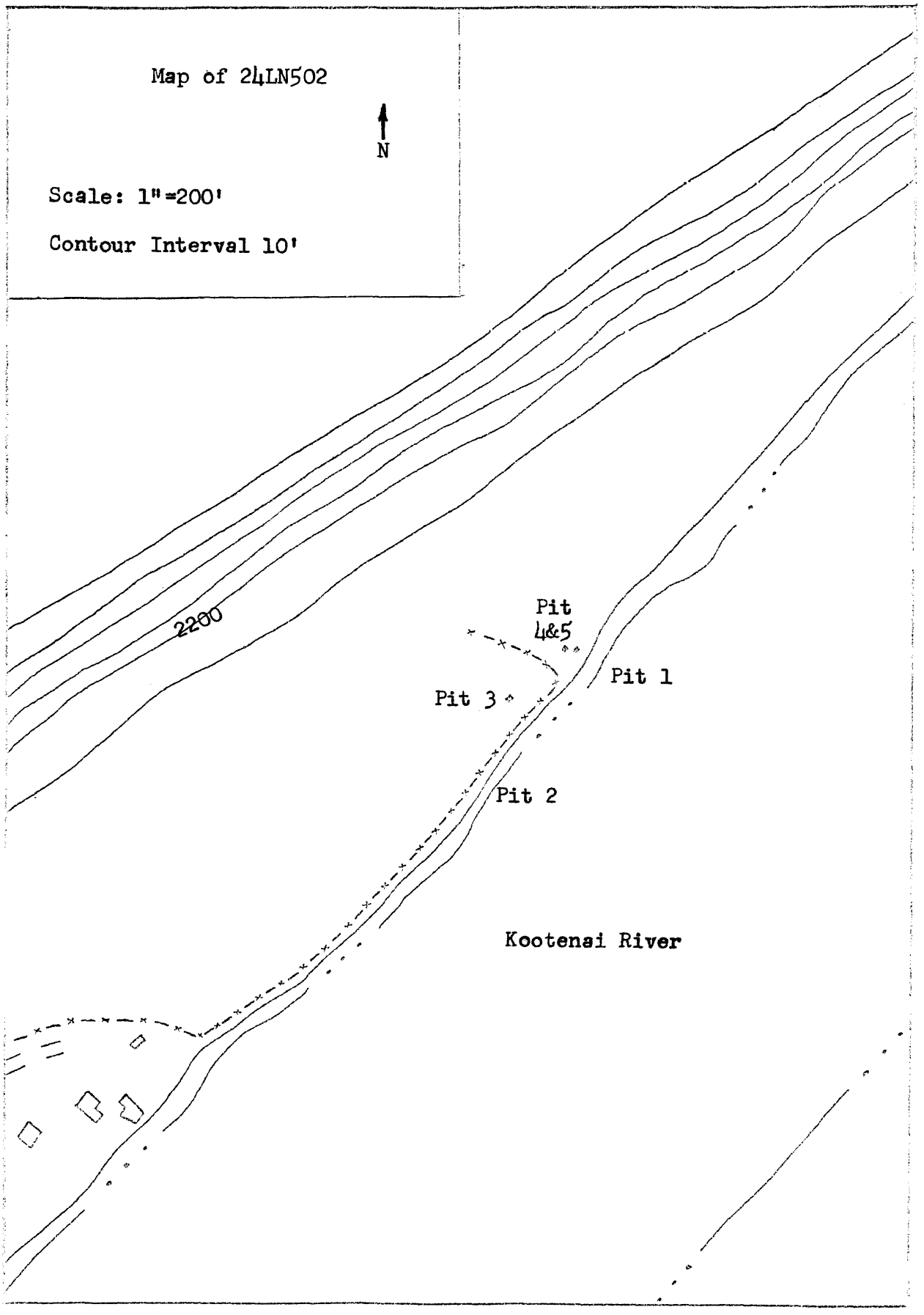
As the upper five square feet of overburden was removed to a depth of twelve and one half inches it was observed that the rocks were arranged in a circular pattern. Further investigation demonstrated this feature to be a fire hearth, circular in plan view and hemispherical in cross-section. It appears to have been used as either a boiling or roasting pit. The trench was subsequently dug to a depth of three feet yielding no more information.

A second pit was dug one hundred yards south of pit one. Excavation was conducted in the same manner as was done for the first pit. No significant cultural material was recovered.

Upon initial survey it was observed that there were several large depressions irregularly scattered throughout the field. They had an average diameter of fifteen feet and depth of two and one half feet. A test trench was attempted in one of the depressions yielding no evidence of prehistoric affiliation.

The crew returned to 24LN502 near the completion of the second field session with the intention of conducting further excavation. Since during the interim we had become aware that the field had been plowed it was decided to concentrate our efforts in a clearing on the northern periphery of the site out of the plowed area.

Two trenches of ten square feet each were dug with little success in the recovery of cultural debris. The bottom of both trenches were full of fire cracked rock and burned bone. There was no discernible pattern to the rocks and few objects of archaeological significance were


Map of 24LN502
N
Scale: 1"=200'
Contour Interval 10'
2200
Pit 4&5
Pit 1
Pit 3
Pit 2
Kootenai River

recovered thus it was decided to abandon this site.

Six projectile points were recovered from 24LN502, one NBa1s, one NBb1s, one SCa3s, and three partial points. Other artifacts recovered include three scrapers, Type I, two scrapers, Type II, one unifacially worked flake, and one bifacially worked flake. A large granite "metate" was found in the river ten feet east of the site.

24LN503 Upper Terrace

Site 24LN503 is on the first ascending terrace to the northwest of 24LN502. It is designated as a separate site as there is a significant stylistic difference between the artifacts recovered from the two sites and because there are several hundred feet between them that appear devoid of cultural material.

The terrace on which 24LN503 occurs is approximately forty feet higher than the river terrace. The site extends along this terrace for approximately sixteen hundred feet north to south. It extends west from the terrace edge for about fifty to one hundred feet. The major concentration of material occurs in the Southwest Quarter of Section 7, Township 32 North, Range 28 West.

The occupation area is on flat ground, sparsely covered by pine and kinnekinic. The soil is sandy although there are many rocks present. The southern five hundred feet of the site is in a plowed field surrounded by a barbed wire fence. The only accessible water from the site is the Kootenai River. The area had been logged in the past and the northern end of the site was again being logged. Much of the material collected was found in rodent holes which are present throughout the site.

24LN502 was found during the surface survey conducted during the

first field session. No further work was done at that time although the site was recommended for excavation the following summer.

Eight pits were dug during the excavation of 24LN503. Four of these were ten feet by ten feet, the remainder, five by five. The average pit depth was one foot as indications from the terrace profile demonstrated only one level of occupation. The pits were approximately one hundred yards apart along the north-south line of the site. Two pits were dug directly on the lip of the terrace. One pit was dug one hundred feet west of the terrace edge and proved to be sterile. Material that was recovered from other pits was most heavily concentrated at a depth of six to eight inches.

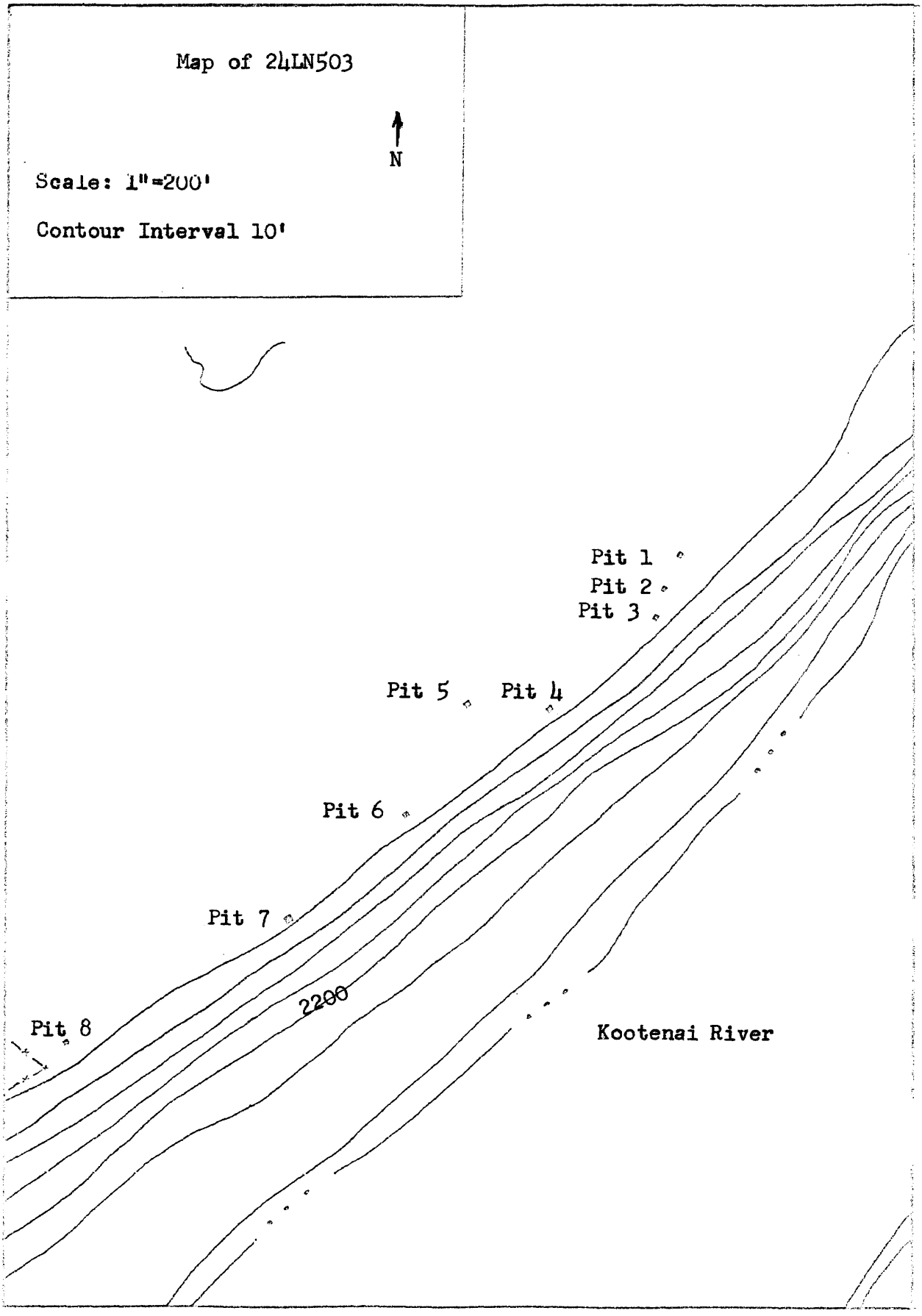
Six projectile points were salvaged from 24LN503, one NAb2, one SBa, one SCa1, one SCb1w, one SCb1o, and one SCb2. One pestle, one sraper, Type I, three knives, and seven unifacially worked flakes were also collected. The point to a drill was found on the surface.

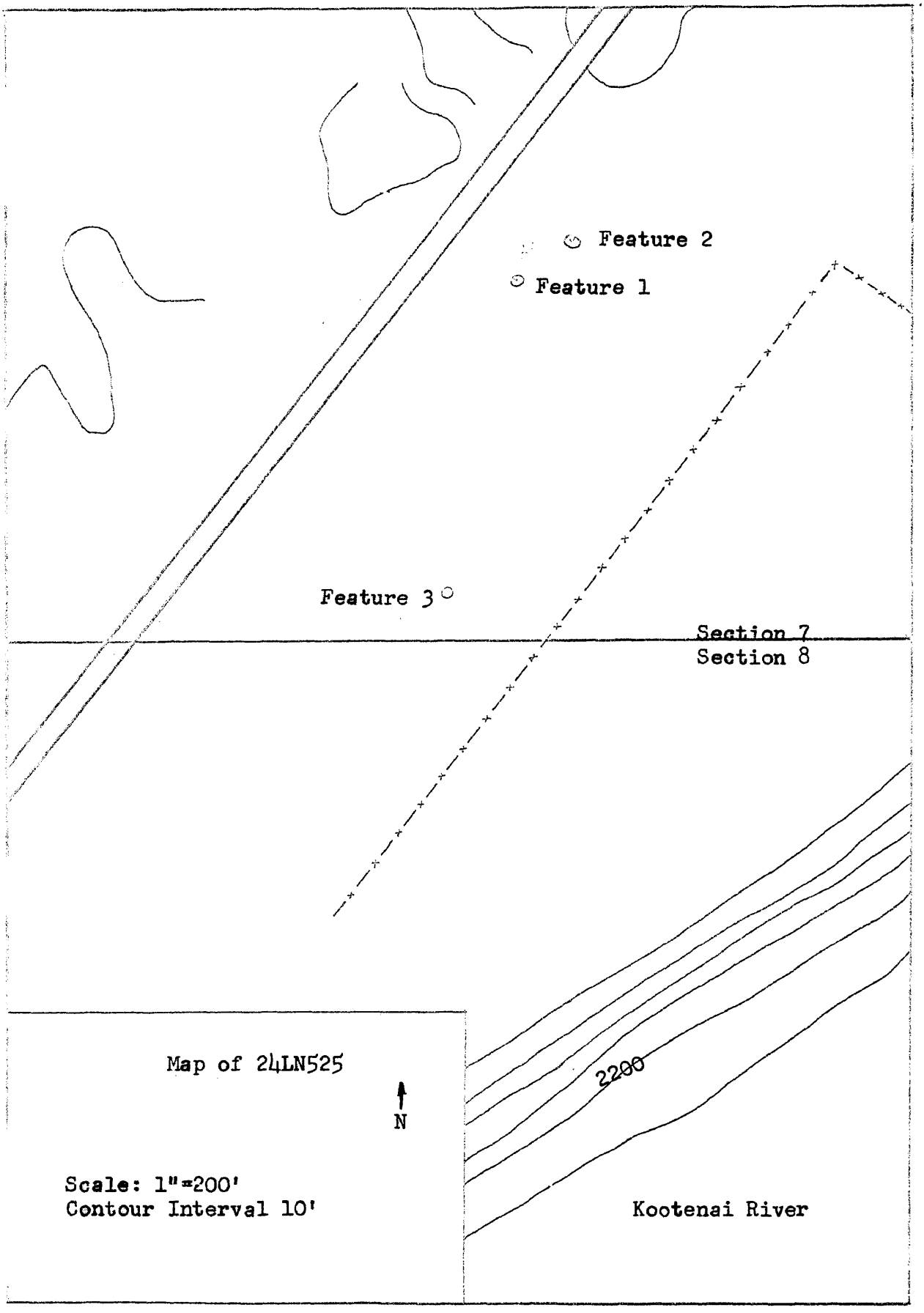
24LN525 Pit Site

24LN525 is located directly west of 503. The site is only a short distance east of Montana Highway 37 and is directly west of the fenced field that marks the southern periphery of 503.

This was designated a separate site as there is no continuation of material between the two sites. It was located during the excavation of 24LN503.

No artifacts were recovered on this site. It was so designated as a result of the presence of three large pits. These pits are circular in shape and at a depth of eighteen inches to two feet. Diameters vary from ten to fifteen feet. In each case there is dirt piled around


Map of 24LN503
N
Scale: 1"=200'
Contour Interval 10'
Pit 1
Pit 2
Pit 3
Pit 5
Pit 4
Pit 6
Pit 7
2200
Pit 8
Kootenai River


Feature 2
Feature 1
Feature 3
Section 7
Section 8
2200
Map of 24LN525
N
Scale: 1"=200'
Contour Interval 10'
Kootenai River

all but the northern portion of the circle. These piles are continuous and level at about six inches above the ground surface.

The two most clearly delineated pits were excavated. One was approached from the south with a trench five feet wide and three feet deep. This was commenced five feet before the southern edge of the pit and continued three quarters of the way through the pit. The technique of excavation was slicing with a shovel and careful screening of all spall dirt. No material was recovered, no charcoal, bone, or fire cracked rock was observed, and no floor was apparent.

The second pit was excavated in a different manner. Its outer peripheries were marked and an attempt was made to peel the pit working carefully from the top with shovel, trowel, rake, and broom. Again all results were negative.

There are no adequate explanations for the presence of these pits. They do not appear to be holes remaining from falling trees as they are too symetrical and well defined. If they are of aboriginal construction they would indicate either cooking pits, dwelling remains, or sweat bath remains. There was no evidence uncovered during excavation to support any of these postulates. Ambrose Gravelle mentioned that the Kutenai used to dig large roasting pits in which they cooked game animals. These he maintains were cleaned out after use so they could again be utilized by passing groups. If this is so and these are pits used for that purpose, one would expect some residue from the cooking process to be present nearby.

24LN504 Homestead Site

24LN504 was the first site to be located by the survey on the

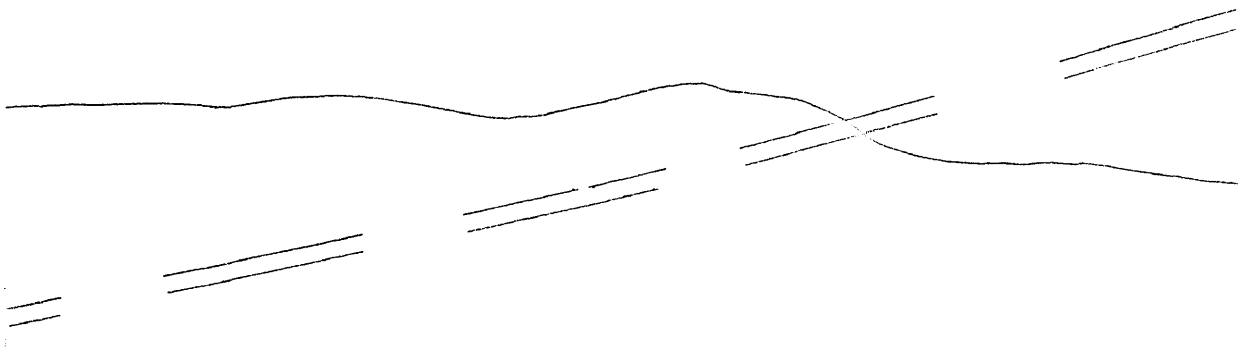
east side of the Kootenai River. It is slightly over four miles south of Warland, Montana, directly east of the Great Northern Railroad tracks, and three quarters of a mile north of Canyon Creek. Steep hills border the site on the east. The site is on the river terrace in the Northwest Quarter of Section 22, Township 31 North, and Range 28 West.

The occupation area appears to be entirely within the bounds of a cleared meadow on which there existed an abandoned house and out buildings. These have since been removed by Libby Dam construction activities. The field is flat and covered by grass, and some elderberry and Oregon grape bushes. The surrounding area is densely pine covered. The cleared area extends four hundred and thirty feet from north to south and two hundred feet from east to west. The soil is sandy with river deposited pebbles throughout.

One half day of surface survey was devoted to the site when it was found during the first field session. As the cultural material was relatively abundant it was decided to excavate the site if time permitted during the second field session.

Before it was possible to commence work on 24LN504 almost half of the site had been destroyed by road building operations. Thus excavation was limited to the western half of the site which had not been disturbed. One five by five pit was excavated near the southern boundary of the field and a ten by five was dug near the center where material was most abundant. As earlier test pitting had indicated only one level of occupation, both pits were dug only to a depth of one foot.

Two projectile points were found on 24LN504, both on the surface, and both SCbl. One knife, one unifacially worked flake, and numerous chips comprise the remainder of salvaged cultural debris. No features



Pit 1

Pit 2

Section22

Section21

2190

Kootenai River

Map of 24LN504

N

Scale: 1"=100'

Conhour Interval 10'

were observed.

The portion of the site destroyed by the road crews did not appear , when initially investigated, to contain as much material on the surface as the western half. Since subsequent excavation on the intact portion yielded little material, it is felt that there was no significant loss.

24LN505 Cripple Horse Creek South

Site 24LN505 is located on the east side of the Kootenai River one and one half mile south of Warland. It is east of the river and adjacent railroad tracks by approximately one half mile. Its northern boundary is formed by Cripple Horse Creek. The site is forty feet higher in elevation than the river. It is bordered on the west by steep sided hills and on the south by a fairly sharp decline. The area designated as 24LN505 is in the Northeast Quarter of Section 3, Township 31 North, Range 28 West.

24LN505 is on a flat sparsely vegetated terrace. It is part of the property used for the private logging operations of the J.C. Neil Company and has undergone a considerable amount of logging activity in the past. The remaining ground cover is of ponderosa pine, Oregon grape, and kinnekinic, there is some grass cover. Cripple Horse Creek is a fast moving stream approximately seven feet wide in the vicinity of the site. It does not flow during extremely dry summers.

The surface has been seriously disturbed by past logging operations. There are heavy equipment ruts, and holes left from uprooted trees throughout the area. There has also been a bit of disturbance from rodent action.

Investigation of the site was limited to about three hours of surface survey, no excavation was recommended. Only two projectile points were recovered. No chipping detritus, evidence of food preparation, or other signs of occupation were observed. The projectile points found were SCa2 and SCb1.

24LN506 Cripple Horse Creek North

24LN506 is approximately one quarter of a mile north of 505. It is accessible by a Forest Service road that proceeds south from Warland. The site is on a logging road that enters the main road from the east. The terrace on which the site is located is approximately the same elevation as 505. The two sites are separated by a deep canyon caused by the flow of Cripple Horse Creek, a branch of which forms the southern border of 24LN506. The terrace curves to the west at this point thus 24LN506 is about one hundred yards closer to the Kootenai River. The site is in the same quarter section as 24LN505.

The dominant landmark on the site is a sandy knoll that is located on its southern periphery. It is about ten feet higher than the rest of the site and covers an area of approximately one hundred square feet. Cultural debris is continuously deposited from the knoll north for one quarter of a mile.

The property on which the site is located is owned by the J.C. Neil Company and has been quite thoroughly logged. Ground cover remaining is of pine, grass, kinnekinic and Oregon grape. The knoll is sand covered and almost devoid of vegetation. The soil covering the remainder of the site is hard and rocky.

24LN506 was extensively surveyed during the first field session.

It was felt that the distribution of chips and flakes was sufficiently dense to warrant excavation.

Three pits were dug on 24LN506. A five by five pit was dug on the sand covered knoll to a depth of two feet. A second five by five pit was dug in the center of the site. Neither pit produced a significant amount of material in comparison to that collected on the surface. The third pit was dug in the area where cultural material was most heavily concentrated. This was on the western edge of the terrace, directly north of the knoll. A ten by ten foot trench was dug to a depth of ten inches. The southeast quarter of the pit was further dug to a depth of eighteen inches to determine if another level of occupation was present.

Although 24LN506 yielded very few artifacts, the concentration of chips and flakes was as dense and as widely distributed on the surface as any site on the Kootenai. Many large flakes with some signs of retouch were recovered. The only definite artifacts recovered were the tip to a knife and an elaborately shaped unifacially worked flake.

24LN507 Burned House Site

24LN507 is located on the east bank of the Kootenai River approximately one quarter of a mile south of Warland. It is the southernmost house on the only street within the town of Warland. The terrace on which the site is located is the river terrace which extends several miles to the north and south. It extends east from the river about one quarter of a mile. The site is in the southeast quarter of Section 34, Township 32 North, Range 28 West.

The area designated 24LN507 is a large grass covered meadow on

which a house recently burned to the ground. The field is covered by an extremely heavy growth of grass which precludes any but the most cursory surface survey. All indications to the existence of the site occured in the river bank. The field had been plowed several times in the past.

No cultural material was salvaged from 24LN507. Its designation as a site stemmed from a dense concentration of fire cracked rock and burned and split bone washing out of the bank.

24LN508 Norris Ranch

This is one of the few sites found by the survey crew through information offered by informants. The owner of the ranch on which the site is located had found some material on his property and informed us about it.

The site is on the Norris Ranch on the east side of the Kootenai River. Spring Creek forms the northern boundary of the site and is where the first material was found. The ranch covers both the river terrace and the first ascending terrace where the bulk of cultural material was collected. The upper terrace is bisected by the East Kootenai Road about eight and one half miles north of Warland. The site occurs on either side of the road. The occupation area appears to cover six or seven acres on the upper terrace. An insufficient amount of material was found on the lower terrace to determine the total area of occupation for the site. All material collected is in the Southwest Quarter of Section 34, Township 33 North, Range 28 West.

Both levels of the site are flat and have been cleared of most large vegetation. The upper terrace has a very sparse grass cover and

is used for the grazing of cattle. It has been plowed numerous times. The lower field is quite damp and is used for growing alfalfa and hay. The cover here is very dense and it is impossible to see the surface. The river bank is mostly caved in and has a thich cover of small bushes. The only area in which there is a significant amount of trees is near the creek. Most of these are cottonwoods.

There is a difference in elevation between the upper and lower levels of about thirty feet. While the creek passes through both levels, the lower level also contains three springs.

The major portion of one day was spent at the Norris Ranch site. Much of this time was spent in photographing the collection of the owner. Less time was devoted to survey due to the ground cover. Material collected on the site was too sparsely distributed to justify excavation.

Although quite a bit of chipping detritus was salvaged, no artifacts were collected. The only artifact found, to our knowledge, on this site was one implement in the possession of Mister Norris. This is the only artifact found during the survey that is of a material other than stone. It is a long piece of elk antler with the tip and edges highly polished. It appears to have been used as a dibble.

24LN509 Parsnip Creek

The Parsnip Creek site is located directly north of Parsnip Creek on the west side of the Kootenai River. It is accessible from Montana Highway 37 by a logging road that joins the highway thirteen miles north of Warland. The site is bounded on the north and west by steep hills. The terrace continues south for several miles past the creek. The site is in the Northeast Quarter of Section 35, Township 34 North, Range 29 West.

This is one of the few sites found on the Kootenai that is not primarily situated on level ground. The ground cover on this site is extremely dense. Although the area had been logged in the past, there are numerous pine and cottonwood present. There is also grass cover and numerous small bushes on the site. The surface is littered with pine needles, leaves, twigs, logs, and boulders. Most of the material found on the site was located within the bounds of an old logging road.

Because of the difficulty imposed on a successful surface survey by the dense ground cover, the boundaries of the site cannot be clearly defined.

The site was found during the first field session. A full half day of surface survey was devoted to 24LN509 as a significant amount of material was present but difficult to find due to the dense ground cover. The site was recommended to be excavated the following summer.

Two trenches were dug in 24LN509. The first was a five by five dug to a depth of twelve inches. It was ascertained from examining the river bank that there was only one level of occupation. Very little material was recovered from the pit and most of this came from the first few inches below the surface. This pit was undertaken in the area where the surface indications seemed to offer the most potential.

The second pit was begun in a clear area near the southern end of the site. This trench had the opposite results of the first in that there was a significant increase in the density of the cultural deposit below the surface. The culture bearing zone appeared to be at a depth of six inches. The pit was started as a five by five but was increased to ten feet on its north-south axis. Digging conditions were extremely

poor in both excavations. It was decided that more material could be collected from the surface in less time with significantly less effort.

No projectile points were found during the investigation of 24LN 509. One small fully grooved stone maul in very bad condition was found during the initial survey. One scraper, Type II, was salvaged with two unifacially worked flakes, and one bifacially worked flake. One implement with a facet for hafting was recovered. It appears to have been used as a scraper. There was a substantial amount of chipping detritus on the site. Some burned bone and fire cracked rock was observed.

24LN510 Big Creek Pictographs

This site is a pictograph panel located on Big Creek Road. It is one mile west of Montana Highwat 37 and one and one half mile north of Big Creek Campground. The panel is on an upward slope to the third terrace above the Kootenai River which flows one mile to the east. A bench marker abput twenty feet below the panel indicates that the site is less than one hundred feet above the proposed pool area for the Libby Dam resevoir. Big Creek flows to the south of the site at a much lower elevation. The pictograph panel is in the Northwest Quarter of Section 3, Range 29 West, Township 34 North.

The pictographs are drawn on the stone wall inside an overhang that lies under a large stone shelf. The exposure of the sheltered area is to the south. The majority of the slope on which the site occurs is devoid of soil or vegetation and takes the form of large stone shelves or ledges. Where ground cover exists it is usually of pine or juniper trees. There are some small bushes and a little grass. Some bushes were growing from the small amount of fill remaining in the overhang.

The wall on which the pictographs are drawn is in from the overhang a distance of eight to ten feet. There are sixty four feet between the first and last drawings. They vary in distance from the floor from two to nine feet.

When the panel was first located the immediate surrounding area was surveyed in an attempt to find some material of lithic construction that could be associated with the pictographs. It was also anticipated that some pottery might be found in which the paint would have been mixed. When surface survey proved fruitless it was decided to excavate the remaining fill from the overhang.

All the fill was removed and carefully screened. Results were negative. It is possible that any material that might have been present would have been destroyed when Big Creek Road was cut, or simply that none was left behind by the perpetrators of the panel.

All the drawings on the panel are of red paint, presumably red ochre, except a series of vertical lines in black that appear to be part of a large geometric figure. The subjects depicted on the panel vary from representative drawings to geometric figures to vertical "day count" lines.

The representative art appears to be of animal and human figures. Some of these are in outline, others completely colored. Those human figures that can be defined appear to be front view. The animals are in profile. There is one drawing that may be a human head in three quarter view but its condition is such that it amy merely be a geometric figure.

The geometric figures vary in size and shape but are fairly typical of pictographs found in Western Montana. There are several

series of vertical lines varying in size and number.

24LN511 Sophie Lake

The Sophie Lake site is not in the Libby Dam pool area but it is sufficiently near and has been so badly disturbed by "pot hunters" that it should be officially recorded. The site is the area around Sophie Lake near Eureka, Montana. It is located on a terrace about two miles east of the Kootenai River. It is east of Sophie Lake Road. This road leaves Montana Highway 37 approximately three miles east of the Rexford Bridge. The lake is three and three quarters of a mile north of this intersection. The lake itself is one and three quarters of a mile long and one third of a mile wide at its widest point. The entire area surrounding the lake appears to have been occupied in prehistoric times. Cultural evidence on the southern shore appears to be restricted to a thin band no more than fifty feet at any point from the lake at high water. Evidence on the north shore continues in that direction for at least a half mile. The site is in the Northeast Quarter of Section 21, and all of Section 15 and 16 in Township 37 North, Range 27 West.

This area is a western extension of the Tobacco Plains. It is dry and sandy with sparse vegetal cover. Where trees occur they are usually scrub pine. There is very little grass and some sage brush and cactus. There is little stone in the area.

There are several other lakes near 24LN511. All of these, as Sophie Lake, are mud bottomed and spring fed. The few creeks in the vicinity are slow moving and cease to flow during dry climatic circumstances.

The bulk of material recovered from the Sophie Lake site came from the area on the northern shore of the lake. There were two areas where the concentration was most dense. One of these was on the shore in the far northeast corner, the second was approximately one third of a mile directly north of the former.

Most of the material salvaged from the first area was found within one hundred feet from the lake and on flat ground. Material from the second area was on either flat ground or on a gentle southward slope descending toward the lake. There were three large blowouts in the second area in which a great deal of material was recovered. These appear to be natural in origin. The smallest of the blowouts covers well over six hundrd square feet. Directly north of the blowouts, over a slight rise, are several mounds. It has not been determined whether these are of natural origin or of native construction. Slightly to the east of the mounds is a pit that was apparently dug by man. It is two feet deep in the center, twelve feet across, and completely encircled by a rim of dirt. No excavation was attempted on this feature however close examination revealed little to indicate that it may have been of pre-white construction.

No projectile points were recovered on this site. One triangular artifact with a flute for hafting somewhat resembles a point, however, the flute is too far off center to allow true flight. The artifact appears to have been used as a knife. One of the few examples of early trade found during the survey was recovered on the Sophie Lake site. This was a small blue bead with a hole through its middle. One drill, one scraper Type II, one knife, one unifacially worked flake, and two bifacially worked flakes are the remainder of artifacts recovered.

24LN512 Rexford Flat

24LN512 was given a site number on the basis of numerous large stone configurations that appeared to be tipi rings. After further investigations it was determined that these were not tipi rings but stones haphazardly scattered throughout a field. No evidence whatsoever of prehistoric occupation was found on 24LN512.

24LN513 Hammon's Gardens

Hammon's Gardens was the second most productive site found on the Kootenai during the present investigation. It is located on the west bank of the river. It is bordered on the west by Montana Highway 37. The entrance to 24LN513 is a driveway exiting the highway six and one half miles north of Big Creek Road and two and one half miles south of the Rexford Bridge. There is no flat river terrace in this area. The site occurs on the bottom of a slope that commences several hundred feet to the west. This same slope continues north and south for over a mile. 24LN513 is in the Northeast Quarter of Section 6, Township 35 North, Range 28 West.

All cultural material collected on 24LN513 was found on the property of Charles Hammon. This property has since been purchased by the corps of engineers and is presently the site for the construction of a bridge.

The area of occupation on the site extends from its southern extremity, a garden, north about three quarters of a mile . All but the northernmost one hundred feet of the site is on a cleared field which is covered primarily by grass and small bushes. There are pines scattered throughout the field. The vegetation on the river bank and on

the northern end of the site is quite dense. The soil is fairly hard and contains water deposited gravel. The occupation area is mainly restricted to the river bank. The farthest west a significant amount of material was recovered was less than one hundred feet from the river.

Most material collected from the site came from the small garden in the southeastern corner. The garden had been plowed and contained no vegetal cover.

After an extremely successful first day of surface survey it was decided to excavate 24LN513. Test pitting and the majority of digging was conducted during the first field session. All excavation was done with a shovel and screen as the nature of the soil precluded trowelling.

As the property was still occupied by Mister Hammon when excavation was commenced, most work was done in the northern half of the site. The first pit was dug on the river bank approximately one hundred yards from the site's northern boundary. It was dug to a depth of three feet. From this and five subsequent pits it was determined that the culture bearing level was from two to six inches below the surface. A last pit was excavated in 24LN513 at the beginning of the second summer in the field. At this time the property had already been purchased from Mister Hammon by the Corps of Engineers. This enabled us to attempt a pit in the garden that proved so lucrative during initial surface survey. A pit was dug in the northwest corner of the garden. The results were disappointing as the pit yielded far less material than was collected on its surface.

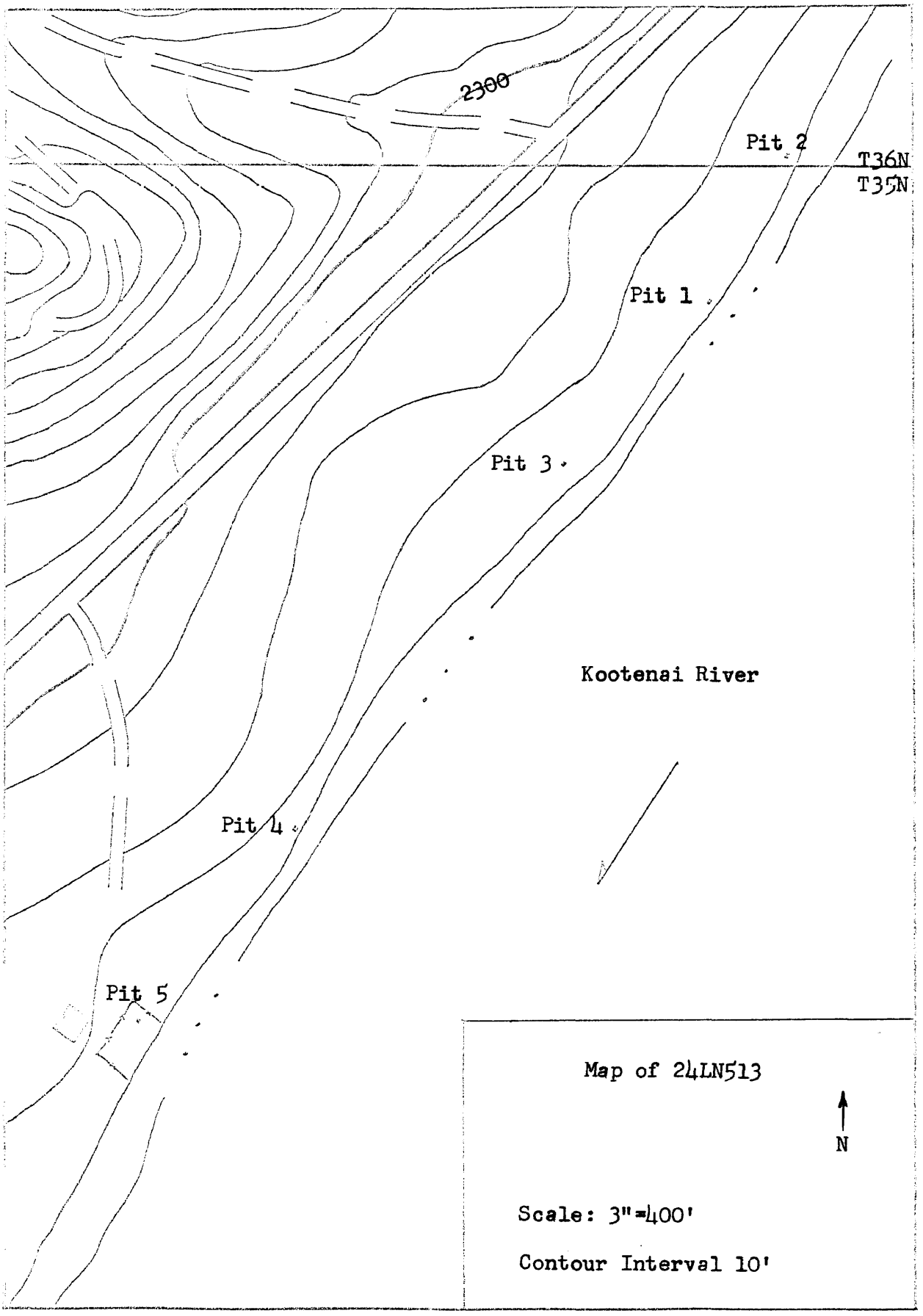
Twenty seven projectile points were recovered from 24LN513. These included one NAb2, one NBa, two NBal, five NBals, three NBb, three NBbl, three NBbls, one SBa, two SCaln, one SCa2, one SCa2s, and four partial

points. One implement of ground stone was found. This was a fully grooved maul broken in two pieces. A trade item in the form of a triangular copper pendant was also collected. Seven scrapers, Type I, and three scrapers, Type II, were located on this site. Eight knives and four unifacially worked flakes were also recovered. Numerous chips and flakes were also found. A surprisingly small amount of fire cracked rock and burned bone was encountered.

24LN514 Bernard Ranch

Site 24LN514 is located on the west side of the Kootenai River. It is accessible from the West Kootenai Road, three miles north of the Rexford bridge. A driveway to the Bernard Ranch turns off the road to the east. The site begins at this turn and continues to the river, approximately one half mile. Cultural evidence continues south about about two hundred yards from the driveway. The river terrace on which the site is located continues north and south for more than a mile and west to the road where it ends in an abrupt rock cliff. The Bernard ranch is in the Northeast Quarter of Section 3, Township 36 North, Range 28 West.

Although cultural material was recovered throughout the area there were two primary concentrations. Most lithic material came from the field directly east of the West Kootenai Road. This area appears to have been an island in the fairly recent past. Water channels are still obvious on all sides of the field. These are about seven feet lower in elevation than the field and are presently quite swampy. These channels can be traced to the Kootenai River. The other culture bearing area is south of the ranch buildings directly on the river bank.


2300
Pit 2
T36N
T35N
Pit 1
Pit 3
Kootenai River
Pit 4
Pit 5
Map of 24LN513
N
Scale: 3"=400'
Contour Interval 10'

Most of the property has been cleared and plowed. The primary vegetal cover is grass although the southern end of the site has a substantial pine cover. A small field to the north of the house had been freshly plowed and had no vegetal cover. The area on the river bank directly south of the buildings has not been plowed or cleared. It is sparsely covered by pine and grass.

The crew was divided into two groups during the investigation of 24LN514. One group surveyed the island, the other the river bank near the ranch buildings. Even where the concentration of material was heaviest a relatively small amount was recovered. The island yielded little more than a handful of chipping detritus and no definitive artifacts. The river bank contained even fewer chips but was the source of a pestal in the possession of Mister Bernard, the owner of the ranch.

Five tipi rings may be present on the property directly west of the river and south of the buildings. Unfortunately the ground cover in this particular location consists of numerous river deposited stones dispersed throughout the area. To delineate a tipi ring would by to assign it an extremely uncomfortable floor. Here, however, rings are evident. Stone circles can be seen and need not be arbitrarily defined.

No projectile points were recovered on 24LN514. The only artifacts collected were those donated to the crew by Mister Hammon, a pestal and a sandstone grooved maul.

24LN515 Navel Omelette

The Navel Omelette site is located on the west side of the Kootenai River. It is on a high terrace along the river directly south of the Davis Ranch. The site is accessible from the West Kootenai Road

which parallels the terrace approximately one quarter mile west of its river edge. It can be approached on a driveway that intersects with the road four miles north of the Rexford Bridge. A half mile walk north along the terrace edge is necessary to reach the site. The site is in the Northeast Quarter of Section 25, Township 37 North, Range 28 West.

While the terrace on which the site occurs is primarily flat, its northeast corner is eroded to the point where a quarter of an acre slopes downward to the sharp terrace edge. The river is approximately seventy feet below. This corner is covered with sand and clumps of grass. Rocks present on the surface are fire cracked and may be of cultural origin. The majority of the deposits are on this slope.

This site was found during the surface survey conducted during the first summer in the field. As the deposit was rather dense, it was decided to dig test pits in order to determine if the site was to excavated the following summer. Three five by five test pits were dug in all but the southeast corner of the occupation area. In each case test pitting did not prove as fruitful as surface survey.

Only one projectile point was recovered from 24LN515, an NBb. One scraper, Type I, was the only other artifact of native origin. A lead ball that appears to have been fired from an old muzzle loading rifle was also collected. There were no fire hearths evident on the site although an extremely dense concentration of fire cracked rock was present.

24LN516 Abandoned Ranch

Site 24LN516 is located one half mile south of 515. It is in the Southeast Quarter of the same section. The site is a bit smaller than 515. It occupies an area of less than two hundred square feet. There

does not appear to be a connection between the sites as the distibution of lithic material is not continuous. Insufficient data has been collected to determine if the cultural affiliation is the same..

The site is on the property of an abandoned ranch. It does not appear to have been inhabited for at least twenty years. The buildings are caved in and the fences are down. The land around the site appears to have been cultivated while the ranch was in operation.

No artifacts of any sort were recovered from 24LN516. Only a small amount of chipping detritus was collected.

24LN517 International Boundary

The International Boundary site was the most thoroughly investigated by the Kootenai River Basin Archaeological Survey. The site is easily located on the terrace immediately south of the Canadian border and west of the river. The terrace extends south of the border approximately one half mile and west of the river three hundred yards. The elevation of the terrace is forty feet above the river. The site is in the Southwest Quarter of Section 1, Township 37 North, Range 28 West.

The terrace is flat and almost devoid of trees although they are present to some degree on the terrace edge as it descends to the river. The southern boundary of the site is the terrace edge. This descends into a small densely vegetated area centered around a spring which flows into the Kootenai.

A large part of the site has been cleared of stones and plowed. This does not extend into the main area of cultural concentration in the southeast quarter of the terrace.

An abandoned ranch is present on 24LN517. The remains of several buildings stand near the middle of the southern edge of the terrace. There are still walls of log and slab standing around most of the deserted buildings. One has a small fir tree growing from its center. Currently the site and the immediate surrounding area is used for ranging cattle.

The nature of the soil on the site is extremely rocky. River cobbles of various size occur throughout the profile. Because of the density of the cultural deposit on the site and the amount of time devoted to its investigation, it was felt that a geologist should be brought to the area in an attempt to determine the geologic history of the immediate vicinity. This was also done in an attempt to determine the reason for a rather disturbing mixing of typologically and chronologically diverse projectile points occuring in the same stratum. Mister Bill Calvert of Eureka, Montana provided us with his geologic summary of the area. He feels that the terrace was originally formed by glacial activity in the area. After the retreat of the glaciers, he believes, the Kootenai River flowed on the terrace. He explains the mixing of cultural materials as a result of side stream action in which water washed across the site to the river. This he feels could have occured during the last two hundred years.

The site is presently owned by a Mrs. Tom Quirk of Eureka. It was originally homesteaded by James Butts during the late nineteenth or early twentieth century. It appears that there are several buildings on the site that have burned. Among these is a barn the ashes of which are located in the center of the area of highest cultural density.

In 1911 the site was used by the Bonners Ferry Lumber Company

which had been conducting logging operations in the area. The logs were hauled to the Butts homestead and left to sit there for the winter. The following spring they were dropped over the terrace edge into the river and floated down to the Bonners Ferry Mill. This information explains some of the structures on the site that did not correspond to earlier evidence indicating a simple homestead (Johnson 1950:231).

24LN517 was located during the latter part of the first field session. Two days of surface survey were devoted to the site from which tentative boundaries were determined. Two test pits were attempted during the last week of the summer. The first of these was dug in the southeast corner of the site at the edge of the richest cultural deposit. The second pit was dug on the southern edge of the terrace and west of the east edge one hundred and fifty feet. This was done in order to determine if surface indications of a thinning of deposits to the west of the terrace would correspond below the surface. This appeared to be the case, test pit one yielded a substantial amount of more material than pit two.

Before intensive excavation commenced during the summer of 1967 a detailed map of the site was made and the southeast corner of the terrace was marked off in ten foot squares. From a base stake in the extreme southeast corner lines were run thirty feet to the west and one hundred feet to the north. The north line ran parallel to the lip of the terrace. The ten foot squares were marked off within these dimensions. From the fifty foot mark of the north line another line was run to the west fifty feet. This was done in order to extend the west line further than was possible from the 0 foot stake due to a curve in the southern terrace edge.

The base stake was labeled 0-west-0 so as to allow each other stake immediate location in reference to a distance in feet and its direction from the base stake. Thus a point twenty feet from the base stake would be 20-west-0 on the north line and 0-west-20 on the west line.

The first square excavated was 0-west-0. Excavation proceeded north in all squares along the north base line and west in all squares along the west base line. Other squares were dug in a direction correspondent to their departure from either line. Several techniques of excavation were used. The nature of the soil predluded effective use of trowels. Shovels were the main implements employed although picks were also necessary to dislodge the large boulders with which the trenches were replete. It appeared at first that there were two different cultural levels and squares were dug in accordance with these. Further along in the excavation it became apparent that while there were typological differences evident in the material recovered, any variety of artifact might come from any level. At this point arbitrary levels of approximately six inches each were utilized in an attempt to determine if an overall difference might obtrude. Some trowelling was done in an attempt to find artifacts in situ. Several projectile points were located in this manner but again typological differences did not correspond to different levels within the profile.

From square 90-west-0 to the north five by five pits were dug approximately every one hundred yards to the Canadian border. None of these yielded a significant amount of lithic material and several were sterile.

Seventy five projectile points were recovered during the investigation

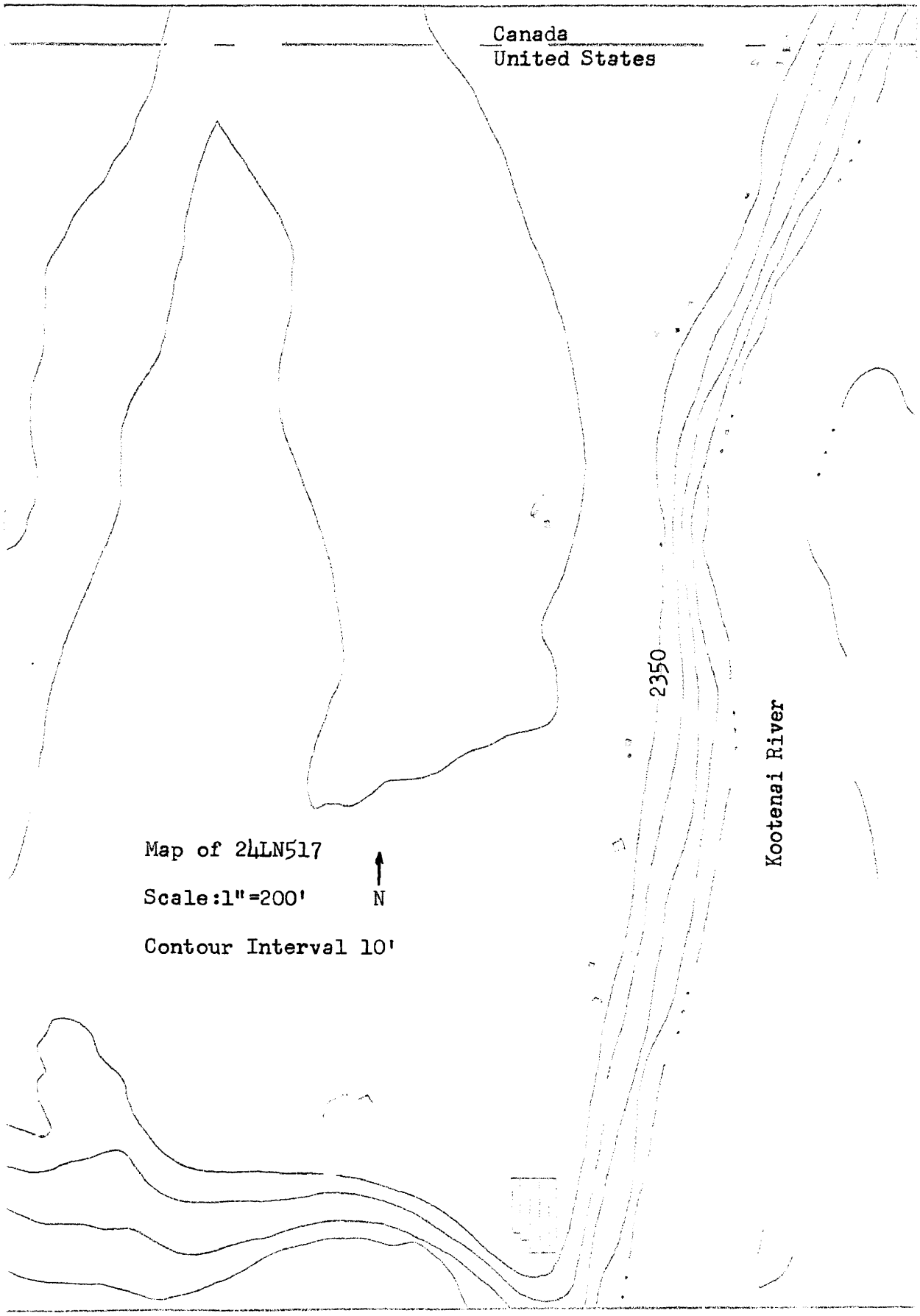
of 24LN517. There was one NAa, one NAb1, one NAb2, one NBa, nine NBa1, two NBa1s, four NBb, three NBb1, one NBb1s, four SBa, two SBao, one SBb, one SBc, one SCa1, one SCa1w, eight SCa2, one SCa2o, one SCa2s, fourteen SCa3, three SCa3w, one SCa3n, one SCa3s, three SCb1, three SCb1w, one SCb1s, and seven partial points. Three implements of ground stone were recovered, a fully grooved maul, and two net weights. Five drills were found on 24LN517. Eighteen scrapers, Type I, eight scrapers, Type II, and fifteen knives were collected. Four tools with facets for hafting that were not projectile points were also salvaged. Fifteen unifacially worked flakes and nine bifacially worked flakes were also among the artifacts from this site. The remainder of the artifacts is made up of two pieces of a ceramic elbow pipe and what may be termed a dual purpose tool. This is a carefully worked "ulu" shaped instrument of chert. One edge is unifacially worked the other bifacially worked.

Several features were excavated on 24LN517. All of these were within the boundaries of the gridded area. All were pits that appear to have been dug for roasting or boiling. A substantial amount of fire cracked rock and burned bone was associated with these.

24LN518 Lower Terrace

This site is located on the terrace directly below the southern edge of 517. If the cultural affiliation is the same it is not evident in continuous cultural deposit. The site is in the same quarter section as 24LN517.

The site is on a flat river terrace. The area of occupation extends the distance of the open area of the terrace along the river bank. Its westward extension has not been determined but does not appear to


Canada
United States
2350
Kootenai River
Map of 24LN517
Scale:1"=200'
N
Contour Interval 10'

exceed the limits of the field. Most material recovered was found in the river bank.

The field is covered by an extremely dense growth of grass. It is bordered by thick pine forest on the west and south. The river bank is mostly bare of vegetation although there are some small bushes present. The northern border of the site is a small spring that originates some distance to the west of the terrace. The soil is mostly sand.

Only surface survey was conducted on 24LN518. Most attention was paid to the river bank where material was either washing out or where the bank had collapsed scattering cultural debris beneath it. Because the cultural deposit was rather thin no excavation was recommended. Most work on the site was conducted during the first field session as river flooding destroyed a large portion of the site and remaining high water precluded further activity.

No projectile points were recovered from 24LN518. One scraper, Type I, was the only artifact recovered.

24LN519 Doble's Meadows

Doble's Meadows is some distance out of the Libby Dam Pool area. However its cultural affiliation is apparently the same as that of most of the sites on the river and it is a site known, according to the property owner, to have been used by the Kutenai Indians.

The site is located on Young Creek Road approximately one and one half mile west of the Kootenai River. This road is accessible from the West Kootenai Road or the Tooley Lake Road. It intersects with each approximately six miles north of the Rexford Bridge. The site is located in a meadow directly north of Young Creek and east of an unnamed stream

that joins Young Creek at this point. The terrace on which the site is located is the third ascending terrace west of the river. Its elevation is four hundred feet higher than that of the river. This terrace continues west for several whiles where it terminates in the foothills of a mountain range. The site is one and one half mile south of the Canadian border in the Northeast Quarter of Section 14, Township 37 North, Range 28 West.

Most of the material found on the site came from a cleared field bordering Young Creek. A wooded area to the north of the field also produced some material. The cleared area is more or less in the form of a basin. There is a downward slope toward the center of the field from all but the eastern side. There is an alfalfa field on the eastern half of the meadow. The soil is hard and rocky throughout. There is a small alkalai lake near the far southern border of the site.

As the site was out of the pool area no excavation was recommended. Several hours of surface survey were conducted and the collection of the owner was photographed and recorded.

No projectile points were found on the site. The only artifacts recovered from the site were found by Mister Doble, the owner, and remain in his possession. These were one pestal, one partial pestal, a grooved maul, and part of a grinding stone. Some chipping detritus was salvaged by the crew.

24LN520 Pinkham Creek

The Pinkham Creek site was found on the east side of the Kootenai River approximately one thousand yards north of Pinkham Creek. The site is bisected by the Great Northern Railroad tracks which run parallel

to the East Kootenai Road. Access to the site is from this road which originates three and one half miles north in Rexford, Montana. Another road intersecting from the east and originating in Eureka also offers access to the site. It is located on the river terrace which extends several miles to the north and south and approximately one mile from the river east to the next ascending terrace. There is a ranch directly southeast of the site. The Pinkham Creek site is in the Southwest Quarter of Section 32, Township 36 North, Range 28 West.

The site extends one hundred yards east to west and three hundred yards north to south. Most cultural material came from two heavy equipment cuts extending the legnth of the site. Because of these cuts there is little ground cover present over the main concentration. The surrounding area is covered with grass pine and Oregon grape. The river and Pinkham Creek provide water access. The creek is about ten feet wide and flows throughout the year.

The site was located during the surface survey conducted the first field session. Most of the material collected at this time came from about fifteen inches below the surface in the cuts. There were large concentrations of fire cracked rock and burned bone throughout the area. As chipping detritus was sparse no excavation was recommended.

One projectile point SCb1 was salvaged from 24LN520. Also collected was one drill, one scraper, Type I, one scraper, Type II, and three unifacially worked flakes.

24LN521 Sophie's Cabin

Sophie's Cabin was the only historical site investigated by the Kootenai River Survey crew. It is located on the property of Doctor

H.D. Smiley on a flat hilltop overlooking Sophie Creek. The site is accessible from the Sophie Lake Road or from the East Kootenai Road. The main area of the site is approximately one half mile east of the Lootenai River and two miles south of the Canadian border. It is in the Northeast Quarter of Section 17, Township 37 North, Range 27 West.

The site is a cabin onee occupied by Sophie Morganeau, a half Indian woman of obscure origins. She moved to the Kootenai River area in the early 1880s opening a sort of trading post and bootlegging establishment. Her business dealt with both whites and Indians. Because she was one of the earliest settlers in this area, dealt a great deal with the Kutenai Indians, and was sufficiently significant to the history of the area to warrant an entire chapter devoted to her life in Tobacco Plains Country (Johnson 1950:41-50), it was decided to excavate the site of her cabin.

Using a photograph as a guide, excavations were centered on locating and mapping all the buildings on the site. An unsuccessful effort was made to find evidence of three tipis present in the photograph.

Two full days of excavation were devoted to the site. Five buildings were located and a major portion of the main cabin exposed. No artifacts of aboriginal construction were recovered from the site although some trade items and one flake were collected.

Pieces of bottles, dishware, and other glass products predominated items of white manufacture found here. Twenty nine square headed nails of varying size were collected. Ten bullet shells most of which are 40-60 or 45-70 caliber were found along with one slug. Two buttons, two belt buckles, part of a pocket watch, a spoon, and several pieces of tin can were also collected. A stand for a sewing machine dated in

the 1880s was left on the site.

24LN522 Murray Island Overlook

Site 24LN522 is located east of the Kootenai River about one and one half mile north of Rexford. At this point the Kootenai flows in several wide shallow streams. The main branch of the river is almost a mile to the west. The Tobacco River which enters the Kootenai from the southeast is one mile to the north. The site is on a high terrace overlooking Murray Island forty feet above the river. An access road enters the site from Montana Highway 37 three quarters of a mile north of Rexford. The site is in the Northwest Quarter of Section 11, Township 36 North, Range 28 West.

The site is on the property of an abandoned homestead. Two buildings remain standing. The foundations of other buildings are also present. There are cleared areas, now overgrown with weeds, that appear to have once been plowed.

The area of occupation covers approximately five acres. This includes most of the terrace. There is a sharp drop on the south and west edges of the terrace. The northern and eastern borders ascend to a higher terrace. The surface of the terrace is mostly flat except where two deep stream cuts bisect the site. It is covered primarily with wild grass and scattered small bushes. There is pine cover on the peripheries and a few trees in the field. The soil is sandy with water deposited pebbles. No excavation was recommended for 24LN522.

Two SCbl projectile points were the only artifacts found on the site. A fairly large amount of chipping detritus was also collected.

24LN523 Gold Creek

24LN523 designates a stone formation on the west side of the river. It is located just north of Gold Creek and directly opposite Stone Hill across the Kootenai. The site is accessible from Montana Highway 37 six miles south of the Rexford Bridge. It is on the west side of the highway in the Northeast Quarter of Section 14, Township 35 North, Range 28 West.

The formation is on a rock ledge about ten feet higher in elevation than the river terrace. This terrace continues north and south for several miles and west about one hundred yards to the next ascending terrace. The feature is approximately two hundred yards west of the river.

There were no artifacts recovered from 24LN523 and no indications of prehistoric encampment. It was designated a site on the basis of the rock formation. That this formation is of human origin is definite. Whether it is of native or white origin, however, remains to tbe determined. The stones used in the construction of the formation are presently covered with lichens. This indicates a certain amount of age is associated with the formation. The lichens are connected between the various strata of stones so there is no question as to whether they were already on the stones when the formation was put together.

There are few houses in the area of 24LN523. The most likely alternative to a prehistoric construction of the feature is that it would have been put together by playing children. The distance of the feature from any house or indication of past houses suggests that this explanation may be inadequate.

To explain the feature in terms of a prehistoric origin on the

basis of present evidence is difficult. The only plausible explanation would be that the feature was used as a vision quest enclosure. There is ethnographic data describing such enclosures for the Kutenai Indians (Baker 1955:12, Malouf and White b:3).

The feature is in the form of a rectangle sixty three inches long and sixty one inches wide. The stones are contiguous on all but the west edge where there is a pile of five stones near the northwest corner. It appears that if this pile were taken down the stones would be sufficient in quantity to complete this edge of the wall. The stones are slabs averaging about two and one half inches in thickness and piled two high in most places. The material is the same as that of which the ledge that supports the feature is composed.

24LN524 Lower Gateway

This was one of the least productive sites found on the Kootenai. It is located on the east bank of the river approximately one half mile south of the Canadian border. It is on the first ascending terrace from the river at an elevation of forty feet above water level. The site is directly accessible from the East Kootenai Road. A driveway proceeds west from the road approaching the last ranch before the town of Gateway. The area of occupation is immediately south of the ranch buildings. The site is in the Northeast Quarter of Section 12, Township 37 North, Range 28 West.

The terrace on which the site occurs is flat on all but its western periphery where it slopes gently upward the last fifty feet to the edge overlooking the river. The area of occupation covers the portion of the terrace one hundred feet south of the ranch buildings to three

feet and extends east from the river bank one hundred feet. The terrace has been plowed several times in the recent past and is currently used as a grazing area for horses. The only vegetal cover of significance is grass.

The site was located during the first field session but was not numbered until the end of the second session when a return trip to the area resulted in locating quite a bit of chipping detritus on the site. No artifacts were found.

24LN526 Twin Lakes

The Twin Lakes site is not in the pool area. It is located on the shore of Twin Lakes, sometimes referred to as Orthorp Lake. This is located about three miles southwest of Eureka, Montana on the Pinkham Creek Road. It is five miles east of the Kootenai River. The lake is in a basin which averages about thirty feet less in elevation than the surrounding terrain. It is one mile long and one eighth of a mile wide. The site is located in the Northeast Quarter of Section 29, Township 36 North, Range 27 West.

The area of occupation occurs on the northwest corner of the lake and extends from the road to the lakeshore. The main concentration is near a group of abandoned and partially burned ranch buildings. The ground cover is mostly grass, some of which is extremely dense in the swampy area near the lake. There are small groves of pine and cottonwood interspersed throughout the site. The area is surrounded by pine forest.

Just one afternoon of surface survey was devoted to the site. A large amount of chipping detritus was recovered. No artifacts were found.

24LN527 Graves Creek

The Graves Creek site is not in the pool area but is believed to be associated with the Kutenai Indians. According to local tradition the Kutenai used this site as a final camping spot in their own territory before attempting to cross the Whitefish Range while travelling east.

The site is located six and one half miles southeast of Eureka, directly southwest of U.S. Highway 93, and north of Graves Creek. It is on the property of a local rancher, Mister Flannagan. 24LN527 is in the Southeast Quarter of Section 15, Township 26 West, Range 35 North.

Most of the material collected on the site is in the possession of the owner. It appears the main area of occupation occurs on a plowed field of about twenty acres. Graves Creek flows to the south of this field. As most of the property is under cultivation this is the only area surveyed. The field is flat sloping only near the southern edge as it nears the creek. Ground cover in areas that have not been cleared is of dense pine forest and cottonwood near the creek. The nature of the soil is hard and rocky. Much of the rocky texture of the soil may be attributed to an extremely dense concentration of fire cracked rock on the site.

Only one afternoon of surface survey was devoted to the site. Several chips and flakes were recovered by the survey crew and no artifacts. The owner had in his possession a large amount of lithic material that he had collected from the field over a period of many years. Among his collection were five stone mauls. All of these were photographed.

Artifact Analysis

Below is a list of definitions of terms as they are used in the site descriptions. Only those terms whose meaning is not obvious or which are often confused in various reports are givem.

Artifact. An implement made and designed by man for an either specific or generalized purpose.

Scraper Type I. An artifact designed for use in operations that involve scraping. Type I scrapers are those that would come off the outside of a Lavallois core, i.e., an egg shaped piece of chipping material trimmed on its outside that may be divided along its most legnthy axis into three pieces. Two of these would be concave and worked on one surface as a result of having been the outside of the core (Loendorf 1968). The effect is what is sometimes called a "turtle-backed scraper".

Scraper Type II. The center piece from the Lavallois core. Both surfaces are flat or convex.

Unifacially Worked Flake. A flake on which workmanship is evident and thorough. Retouch is carefully applied. Pressure for each chipped area comes from the same general angle and side

Bifacially Worked Flake. Same as above but pressure on worked edge comes from both sides of flake.

Projectile Points. Projectile points have been classified according to a typology developed by, and modified from, William Duncan Strong (1935).

Type NAa: (Figure 7, b)

N. Not Stemmed.

A. Leaf-shaped.

a. Pointed at both ends.

Sample: 1

Provenience: 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Daugherty (1952)	Moses Lake, Wash.
Gruhn (1961)	South Central Idaho
Miller (1959)	Kootenai County, Idaho
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Ore.
Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Taylor (1957)	Central Utah
Williams and Orlin (1963)	Southern Nevada

Type NAb1: (Figure 7, c)

b. Pointed at one end.

1. Convex base.

Sample: 1

Provenience: 24LN517

Comparative Specimens:

Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Daugherty (1952)	Moses Lake, Wash.
MacNeish (1950)	Slave Lake, N.W.T.
Malouf (1956a)	Flathead Lake, Mont.
Mulloy (1958)	Billings, Mont.
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Ore.
Smith (1950)	Columbia-Fraser, Wash.
Strong et al.	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park

Type NAb2: (Figure 7, a)

2. Straight base.

Sample: 3

Provenience: 24LN503, 24LN513, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Collier et al. (1942)	Columbia River, Wash.
Forbis (1962)	Central Alberta
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Lynch et al. (1965)	Northwest Idaho
MacNeish (1950)	Mackenzie River, N.W.T.
MacNeish (1953)	Slave Lake, N.W.T.
Malouf (1956a)	Flathead Lake, Montana
Sharrock (1966)	Southwest Wyoming
Smith (1900a)	Lytton, B.C.
Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park

Type NBa: (Figure 7, d)

B. Triangular.

a. Straight base.

Sample: 2

Provenience: 24LN513, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Daugherty (1952)	Moses Lake, Wash.
Forbis (1950)	Helena, Montana
Forbis (1962)	Central Alberta
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Lynch et al. (1965)	Northwest Idaho
MacNeish (1950)	Slave Lake, N.W.T.
Malouf (1956a)	Flathead Lake, Montana
Mill and Osborne (1952)	Grand Coulee, Wash.
Miller (1959)	Kootenai County, Idaho
Miller (1963)	Toole County, Montana
Mulloy (1958)	Billings, Montana
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Ore.
Shutler and Shutler (1963)	Southern Nevada
Smith (1900a)	Lytton, B.C.

Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1968)	Fisher River, Montana
Williams and Orlin (1963)	Southern Nevada

Type NBa1: (Figure 7, e,f)

1. Side notches.

Sample: 19

Provenience: 24LN502, 24LN513, 24LN517

Comparative Specimens:

Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Daugherty (1952)	Moses Lake, Wash.
Davis and Stallcopp (1965)	Phillips County, Mont.
Forbis (1950)	Helena, Montana
Forbis (1962)	Central Alberta
Gruhn (1961)	South Central Idaho
Loendorf (1967)	Carbon County, Montana
Lynch and Olsen (1964)	Southwest Idaho
Lynch et al. (1965)	Northwest Idaho
Malouf (1956a)	Flathead Lake, Montana
Malouf (1962) b	Logan, Montana
Mill and Osborne (1952)	Grand Coulee, Wash.
Miller (1959)	Kootenai County, Idaho
Miller (1963)	Toole County, Montana
Mulloy (1958)	Billings, Montana
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Ore.
Shumate (1967b)	Ulm, Montana
Smith (1900a)	Lytton, B.C.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Taylor (1964)	Yellowstone National Park
Taylor (1968)	Fisher River, Montana
Tro (1968)	Clearwater River, Montana

Type NBb: (Figure 7, h)

b. Concave base.

Sample: 8

Provenience: 24LN513, 24LN515, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah

Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, B.C.
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Mulloy (1958)	Billings, Montana
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shutler and Shutler (1963)	Southern Nevada
Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1968)	Fisher River, Montana

Type NBb1: (Figure 7, g,i)

1. Side notches.

Sample: 6

Provenience: 24LN502, 24LN513, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Arthur (1962)	Livingston, Montana
Collier et al. (1942)	Columbia River, Wash.
Davis and Stallcopp (1965)	Phillips County, Montana
Forbis (1950)	Helena, Montana
Forbis (1962)	Central Alberta
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Lynch and Olsen (1964)	Southwest Idaho
Lynch et al. (1965)	Northwest Idaho
Mill and Osborne (1952)	Grand Coulee, Wash.
Miller (1959)	Kootenai County, Idaho
Miller (1963)	Toole County, Montana
Mulloy (1958)	Billings, Montana
Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Ore.
Shumate (1967b)	Ulm, Montana
Shutler and Shutler (1963)	Southern Nevada
Smith (1900a)	Lytton, B.C.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park
Taylor (1968)	Fisher River, Montana
Tuohy and Swanson (1960)	Southwest Idaho
Williams and Orlin (1963)	Southern Nevada

Type SBa: (Figure 7, j,k)

S. Stemmed.

B. Parallel sided stem.

a. Shouldered.

Sample: 8

Provenience: 24LN503, 24LN513, 24LN517

Comparative Specimens:

Daugherty (1952)	Moses Lake, Wash.
Gruhn (1961)	South Central Idaho
Loendorf (1967)	Carbon County, Montana
Sharrock (1966)	Southwest Wyoming
Smith (1900b)	Thompson River, B.C.
Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah

Type SBb: (Figure 7, l)

b. Barbed.

Sample: 1

Provenience: 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Collier et al. (1942)	Columbia River, B.C.
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Lynch et al. (1965)	Northwest Idaho
Mill and Osborne (1952)	Grand Coulee, Wash.
Shutler and Shutler (1963)	Southern Nevada
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Taylor (1957)	Central Utah

Type SCa1: (Figure 7, m,n,o)

C. Expanding stem.

a. Shouldered.

h. Convex base.

Sample: 6

Provenience: 24LN501, 24LN503, 24LN513, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Arthur (1962)	Livingston, Montana
Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Davis and Stallcopp (1965)	Phillips County, Montana
Daugherty (1952)	Moses Lake, Wash.
Forbis (1950)	Helena, Montana
Forbis (1962)	Central Alberta
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Lynch et al. (1965)	Northwest Idaho
MacNeish (1950)	Slave Lake, N.W.T.
MacNeish (1953)	Mackenzie River, N.W.T.
Malouf (1956a)	Flathead Lake, Montana
Miller (1959)	Kootenai County, Idaho
Mulloy (1958)	Billings, Montana
Sharrock (1966)	Southwest Wyoming
Shumate (1967b)	Ulm, Montana
Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1964)	Yellowstone National Park
Taylor (1968)	Fisher River, Montana

Type SCa2: (Figure 7, p,q,t)

2. Straight base.

Sample: 12

Provenience: 24LN505, 24LN513, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Borden (1956)	Kootenai River, B.C.
Davis and Stallcopp (1965)	Phillips County, Montana
Forbis (1950)	Helena, Montana
Forbis (1962)	Central Alberta
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Lynch et al. (1965)	Northwest Idaho
MacNeish (1950)	Slave Lake, N.W.T.
MacNeish (1953)	Mackenzie River, N.W.T.
Malouf (1956a)	Flathead Lake, Montana
Miller (1959)	Kootenai County, Idaho
Mulloy (1958)	Billings, Montana
Sanger (1964)	Fraser River, B.C.

Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Oregon
Smith (1900a)	Lytton, B.C.
Smith (1950)	Columbia-Fraser, Wash.
Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park
Tro (1968)	Clearwater River, Montana

Type SCa3: (Figure 7, r,s,u)

3. Concave base.

Sample: 20

Provenience: 24LN502, 24LN517

Comparative Specimens:

Aikens (1965)	Southwest Utah
Arthur (1962)	Livingston, Montana
Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Forbis (1950)	Helena, Mont.
Forbis (1953)	Central Alberta
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Lynch et al. (1965)	Northwest Idaho
MacNeish (1950)	Slave Lake, N.W.T.
MacNeish (1953)	Mackenzie River, N.W.T.
Malouf (1956a)	Flathead Lake, Montana
Miller (1959)	Kootenai County, Idaho
Mulloy (1958)	Billings, Montana
Osborne (1961)	Columbia River, Wash.
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shiner (1961)	McNary Resevoir, Ore.
Smith (1950)	Columbia-Fraser, Wash.
Strong et al.	Dalles-Deschutes, Wash.,Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park
Taylor (1968)	Fisher River, Montana
Tro (1968)	Clearwater River, Montana
Tuohy and Swanson (1960)	Southwest Idaho

Type SCb1: (Figure 7, v,w)

b. Barbed.

1. Convex base.

Sample: 15

Provenience: 24LN503, 24LN504, 24LN505, 24LN517, 24LN520, 24LN522

Comparative Specimens:

Aikens (1965)	Southwest Utah
Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Davis and Stallcopp (1965)	Phillips County, Montana
Daugherty (1952)	Moses Lake, Wash.
Forbis (1950)	Helena, Montana
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Malouf (1956a)	Flathead Lake, Montana
Mill and Osborne (1952)	Grand Coulee, Wash.
Mulloy (1958)	Billings, Montana
Sharrock (1966)	Southwest Wyoming
Shutler and Shutler (1963)	Southern Nevada
Smith (1900a)	Lytton, B.C.
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park
Taylor (1968)	Fisher River, Montana
Tro (1968)	Clearwater River, Montana

Type SCb2: (Figure 7, x)

2. Straight base.

Sample: 1

Provenience: 24LN503

Comparative Specimens:

Aikens (1965)	Southwest Utah
Borden (1956)	Kootenai River, B.C.
Collier et al. (1942)	Columbia River, Wash.
Davis and Stallcopp (1965)	Phillips County, Montana
Forbis (1950)	Helena, Montana
Gruhn (1961)	South Central Idaho
Jennings (1957)	Northwest Utah
Loendorf (1967)	Carbon County, Montana
Lynch et al.(1965)	Northwest Idaho
MacNeish (1953)	Mackenzie River, N.W.T.
Malouf (1956a)	Flathead Lake, Montana
Mill and Osborne (1952)	Grand Coulee, Wash.
Miller (1959)	Kootenai County, Idaho
Mulloy (1958)	Billings, Montana
Sanger (1964)	Fraser River, B.C.
Sharrock (1966)	Southwest Wyoming
Shumate (1967a)	Carter, Montana
Smith (1950)	Columbia-Fraser, Wash.

Strong et al. (1930)	Dalles-Deschutes, Wash., Ore.
Susia (1964)	Northeast Nevada
Taylor (1957)	Central Utah
Taylor (1964)	Yellowstone National Park
Taylor (1968)	Fisher River, Montana

Modifications

o. Oversized, projectile point is abnormally large in comparison to other points of this type. Length is more than one and one half inch, width is more than three quarters of an inch.

s. Small, projectile point is abnormally small in comparison to other points of this type. Length is less than one half inch, width is less than one quarter inch.

n. Narrow, projectile point is abnormally narrow in comparison to other points of this type. Length is at least three times greater than width.

w. Wide, projectile point is abnormally wide in comparison to other points of this type. Width is equal to or greater than length.

Explanation of Figure 8

a. Elbow pipe.

b and e. Drills.

c. Hafted scraper.

d. Scraper, Type I.

f. Copper pendant.

g. Trade bead.

h. Scraper, Type II.

i. Dual purpose tool.

j. Knife.

k. Net weight.

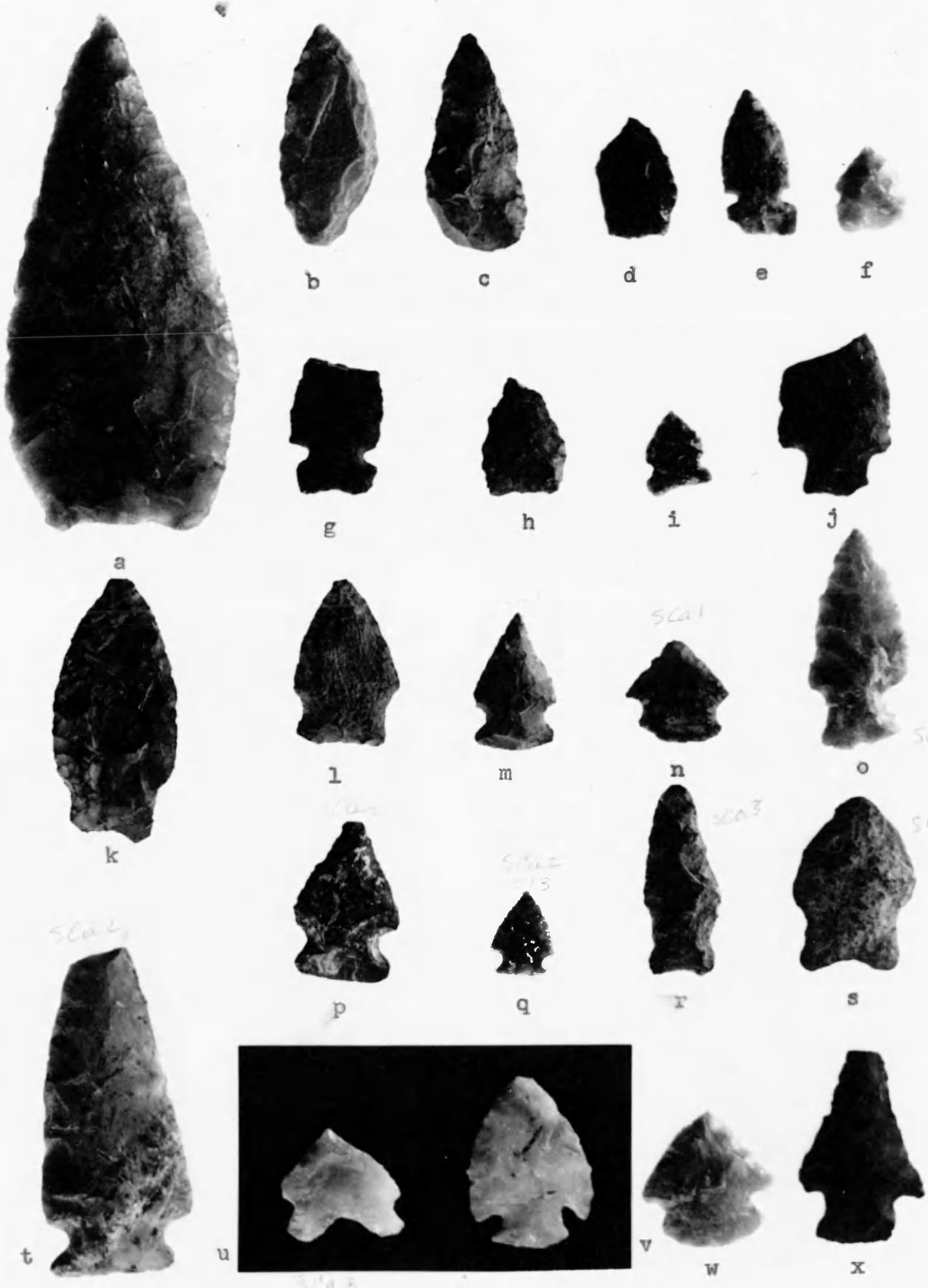


Figure 7. Kootenai River Projectile Point Types

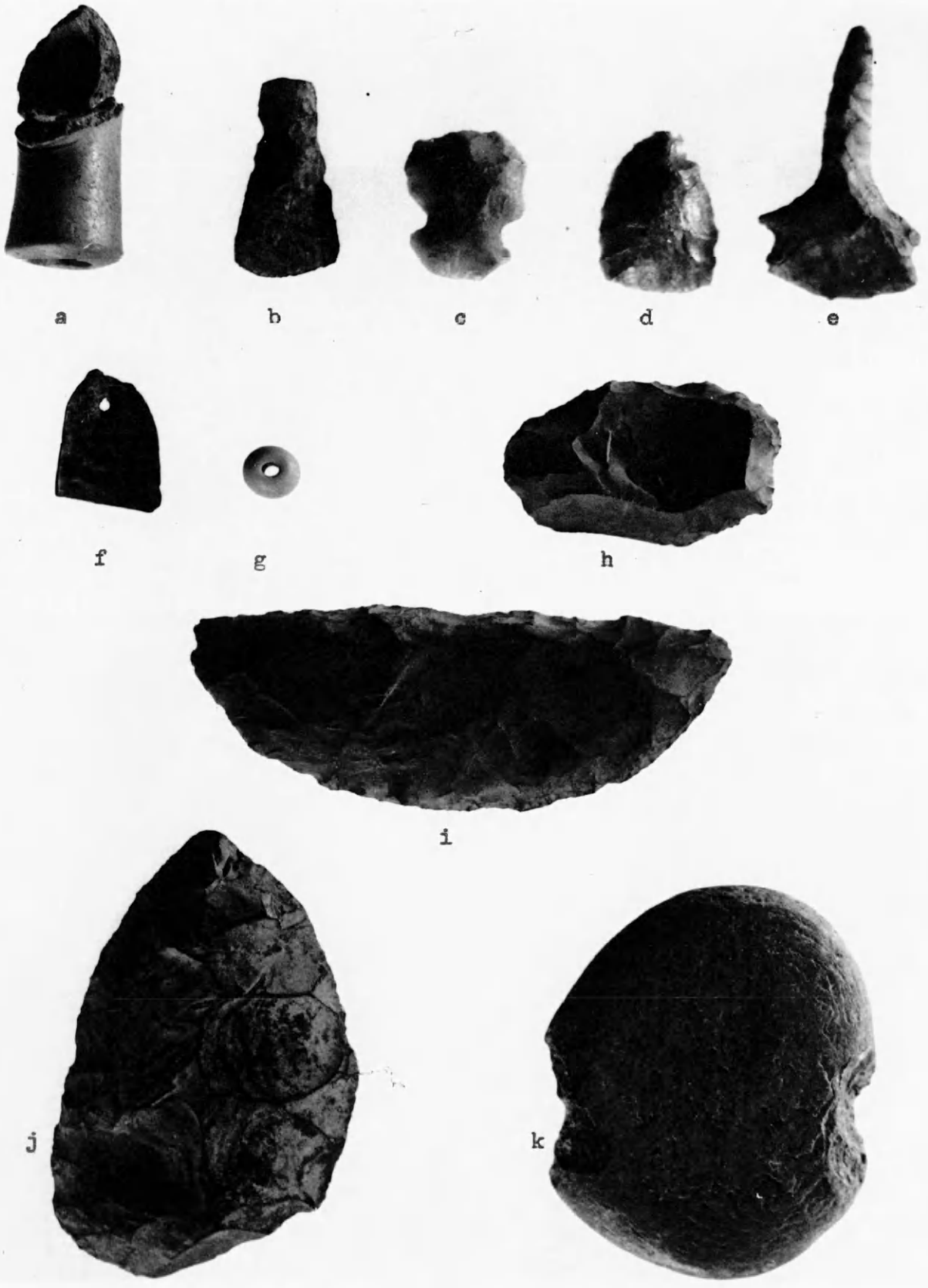


Figure 8. Kootenai River Artifacts

CHAPTER III

MATERIAL CULTURE

Housing

At the time of white contact the primary type dwelling used by the Kutenai was the tipi. These were usually covered by bison or elk hides. The foundation was of four base poles and included up to fifteen supplementary poles (Turney-High 1941:56). It appears that there may also have been an extended variety of the tipi in which there were three four pole foundations together crossed on top by a single ridge pole. These were hide covered with a door in each end (Ray 1945:179). Ambrose Gravelle and Joe Dennis claim that while skin covered tipis were in use, the more common variety was covered with vegetable matter.

The Kutenai also used a variant of the Plateau long house. This appears to be different from the series of joined tipis. Turney-High believes that this was their aboriginal dwelling before the introduction of the horse. The building was constructed of a wooden frame with a matting cover. This was built above a floor dug to a depth of one foot (1941:61).

Kutenai dwellings had their floors covered with bear hides (Schaeffer 1966a:15) or rush mats (Ray 1945:176). Ambrose Gravelle and Joe Dennis feel that most often floors were left uncovered.

Dress and Ornamentation

Kutenai dress was similar to that of their Plains and Plateau

neighbors. The men wore skin shirts, leggings, breech cloths, and moccasins. The women wore a simple skin frock (Turney-High 1941:90,91). Turney-High claims that little emphasis was put upon decorative pattern. Aesthetic pleasure was instead derived from the fringe work and whiteness of the skin dressing. Ray (1945:165) states that the dress of Kutenai men was not left unmarked but that designs were painted on and ornaments attached. Chamberlain (1892:569) feels that mooseskin was the primary material used in the making of the Kutenai costume.

In colder weather hats of buckskin or fur were often worn (Malouf, no date). Turney-High (1941:92) also describes hats of willow, rawhide, and horse mane. Only the fur hat had a covering for the crown.

Moccasins were of simple design, square toed and heeled, and made from just one piece of material (Ibid.). They were made of deer, elk, bison, or caribou skin, or with the fur of the mountain sheep placed on the inside. Sometimes moccasins were worn double or the foot might simply be wrapped in caribou or deer hide. Seams were on the inside (Ray 1945:168).

Shells, stone beads, animal claws, and other small objects were used to make necklaces, wristlets, and earrings (Chamberlain 1892:570).

Religous Implements

Several material objects served religious functions. Of these objects associated with various ceremonials are of primary importance. Along with smaller objects such as claws, rattles, dolls, etc., the sweat bath was important to purify participants. These were constructed over a hole of about four feet in diameter and two feet in depth.. The structure consisted of a willow frame covered with sod and grass or tule mats. A small opening was left to allow entry and exit (Turney-

High 1941:64). Ray (1945:181) classifies the Kutenai sweat lodge as typical of the Great Plains, however, he also notes its presence among most tribes of the Plateau. He feels that bison skin was used rather than mat covers and that the floor was covered with grass and fir twigs. A fire and round pit of rocks was outside the lodge. The doorway was round and composed of a hanging piece of skin. The sweat house was owned by the entire camp and was used communally.

There are various accounts of Kutenai material culture associated with burial practices. Boas (1890:842) gives an account of extended burials in which the deceased was interred between two trees. These were stripped of their bark and painted red. An offering of a piece of highly valued property was tied to a wooden hoop and placed in one of the trees. Ray (1945:216-218) believes that the clothing worn by the corpse at the time of death was removed and replaced, or turned inside out. The corpse was then bound in a buffalo or fur robe and tightly secured. He was bound to a pole with straps of hide and carried to the burial area. Valuables were buried with the corpse and a horse was killed in his honor. The interment usually occured in a talus slope. Graves were marked by poles placed on each of its sides. If the grave was to be hidden, horses were run over it. A feast was held immediately following the funeral in which the possessions of the deceased were distributed.

Transportation

As a result of the mountainous nature of his environment and the associated heavy winter snow, the snowshoe was essential to the Kutenai to allow necessary mobility. While there was a great deal of individual variation in snowshoe construction, there were two basic patterns. One

of these was designed to afford its owner maximum speed while travelling. The preferred pattern was more closely woven in the center and thongs were widely spaced along the edges. One fir sapling was used for each snowshoe. The mesh was of four-ply twined rawhide (Turney-High 1941:66, 67).

The Kutenai are known to have used several different types of water transportation. The craft accepted by most authorities as having been used aboriginally was a variant of the "sturgeon-nosed canoe" found among many peoples of the Columbia Plateau. Ray feels there is nothing particularly unique about the Kutenai canoe, whereas other investigators such as Chamberlain, Mason, and Turney-High believe the form of canoe used by the Kutenai is common to no other tribe in North America.

The Kutenai also used a dugout canoe made from cottonwood and hollowed out by a chisel. They are also believed to have possessed varieties of the "shovel-nosed canoe", a variety of the Plains "bullboat", and watercraft made from lashing parfleshes together. The latter was used to transport goods and children and was towed by a swimmer (Ray 1945:155,156).

Cradle boards, although serving other functions were of primary importance for transportation. Turney-High (1941:114) asserts that the aboriginal type was a birch bark cylinder lined with soft hides. Chamberlain (1892:558) maintains that the earlier cradle board was a simple piece of wood to which the infant was strapped.

Intellectual Devices

The quipu is mnemonic device, believed by some authorites to have diffused from South America to a large portion of North America. It has been put to several different uses by the various cultures to which

it diffused. The Kutenai version of the quipu was a piece of buckstring tied around various objects or knotted. It served as a calendrical record. Records were kept of births, deaths, other important events, and the passing of time (Malouf 1953:34-39). Ray (1945:190) claims the quipu was extensively used by the Kutenai and, unlike most Plateau tribes that used the quipu, had been a Kutenai trait for a long period of time.

The Kutenai had a means for communicating messages symbolically. Feathers and sticks were arranged in a particular manner on a small piece of hide. The number of items used and their arrangement would connote the meaning of the message to its recipient (Malouf and White b). Trail markers also had a symbolic meaning. A vertical pole was placed on a trail to attract attention. If a stake was inclined it indicated a particular direction. A crossed set of sticks indicated death. The age and status of the deceased were indicated by variations in the sticks (Ray 1945:190).

Weapons

The primary weapon used by the Kutenai was the bow and arrow. Cedar and cherry wood were the preffered materials used in the construction of the bow. Sinew was sometimes used as reinforcement. Bow strings were of sinew or, preferably, bear gut. Arrows were made of cedar or ocean spray wood. Three goose or chicken hawk feathers were used to insure accuracy. Points could be of bone,stone, or wood (Turney-High 1941:86).

The pogamoggin or war club was used as a secondary weapon. This consisted of a small stone wrapped in skin that was attached to a rigid, buckskin covered, wooden handle (Ibid.:87). Wooden paddle shaped clubs were also used. A variety of this used only by the Kutenai on the

Plateau was a wooden club with small inset pieces of flint (Ray 1945:152).

Some of the Kutenai wore a wooden armor made of dogbane or ocean spray wood. The chest, back, upper arms, and thighs were covered by a series of rods lashed closely together by strips of dogbane bark (Turney-High 1941:86). Sometimes a wide belt made of hide from the neck of the bull bison or the rump of the mountain goat was also worn. Armor might also take the form of a simple piece of thick hide covering the exposed side of a fighter (Ray 1945:153)

Pipes

There were several varieties of pipes smoked by the Kutenai. They were generally made of banded siliceous argillite and were drilled, carved, and abraded. The tubular pipe is believed to be the earliest form used by the Kutenai. This was followed by the platform pipe and later by the elbow pipe which became the most popular among the Kutenai during the last century (White 1952:7-9).

Subsistence Implements

Most of the edible vegetable matter in the Kutenai environment could be gathered without the aid of tools. To obtain camas and bitter root, however, a dibble, or digging stick was required. Turney-High (1941:33) describes two types of digging sticks used by the Kutenai. One was of willow, approximately three feet in length, pointed and fire hardened on one end with a hole in the opposite end into which was inserted a deer antler handle. The second type was a piece of elk horn about fifteen inches long. It was cut with two prongs intact to serve as a handle.

To procure edible tree barkthe Kutenai used a pole about ten feet long with one flattened end to slip under the bark. The pole was used

as a lever to pry bark off trees. The edible layer was removed from the bark with a stone knife or scraper (Malouf 1952:16).

Hunting was conducted with a bow and arrow or spears. The only implement used in the butchering process was a stone knife. Snares and traps were used for smaller mammals. Pemmican was made by pounding the meat with a stone maul. The meat was set inside a piece of hide during the process and placed on a flat rock. Meat to be dried was put on a frame of lodge poles (Turney-High 1941:37,38).

Unpointed arrows were used to shoot ducks and geese (Chamberlain 1892:564) or they could be decoyed into moveable square nets. Looped sticks were also used in fowling (Turney-High 1941:42).

Most varieties of fish in the Kutenai diet were caught with a fish hook attached to a sinew line. Two types of hooks were used. One consisted of two pieces of fine bone sharpened on one end. These were tied together to form a cross. The line was attached at the point where the pieces of bone met (Ibid.:45). Chamberlain (1892:564,565) describes a similar hook consisting of one sharpened piece of bone tied at its base to a thin twig. A variant of this , used for smaller fish, was made by substituting a spine from the gooseberry plant for the bone. Grooved pieces of stone were used as sinkers. Fish were also taken in cone shaped wicker-work traps or in elaborate weirs that spanned the entire width of streams. Large fish were often speared or harpooned. The most commonly employed harpoon contained a barbless detachable point made of sheep horn.

The Kutenai had numerous means to store food. If an individual were to leave the area for an extended period of time he often left his food in a cache consisting of a wooden platform erected in the fork of

a high tree (Turney-High 1941:53). Bags made of the bladder of various large mammals were used for the storage of bear grease (Schaeffer 1966: 14). Bark buckets or water proofed baskets were used both for storage and cooking. The baskets were usually made of cedar roots woven into an imbricated pattern and coated with pine pitch. Kissell (1909:529-531) maintains that this basket type is most characteristic of the Western Columbia Plateau.

Malouf (no date) reports that food was eaten from bowls of animal skull or wood. Bison horns were sometimes used as bottles. Wooden tongs and horn spoons were used in the handling of food. Palliser (Spry 1963: 138) noted dishes of basket work as the most often used utensil.

CHAPTER IV

SUBSISTENCE AND ENVIRONMENT

This chapter will deal with Kutenai subsistence techniques as practiced in their present geographic locale. A brief description of these practices will be presented.*

The dominant feature in the Kutenai habitat is its mountains and complementary intermontana valleys. This allows a wide range in elevation within the area from about three thousand feet above sea level in the lowest valley to ten thousand at the highest mountain. The rivers related to this area, particularly the Kootenai River, form the nexus of the Kutenai economy, while the wide variety of flora and fauna found in the mountains and valleys form the locus of the hunting and gathering pattern. That is, the river, by virtue of its various seasonal conditions, served to regulate the inception, duration, location, and even the occurence of all of the Kutenai subsistence activities, even though most of these were not practiced in the river itself.

The flora of the Kutenai locale includes the coniferous trees present throughout the area, the deciduous trees located primarily in the valley bottoms, and various bushes and grasses present throughout the area providing food for both man and animals. Among the trees present in this geographic zone, some of economic importance were Western

---

* Information presented in this chapter appears originally in Schaeffer (1940:16-62). Other sources will be so noted.

Yellow Pine, Lodge Pole Pine, Larch, White Birch, Cottonwood, Willow, Spruce, and Cedar. Most of the flora as well as the fauna of this area will be discussed below in relation to the means by which it was exploited by the Kutenai.

Temperatures in the area range from twenty degrees below zero in the winter to over one hundred degrees in the summer. Precipitation ranges from twenty to forty inches a year in the valleys to well above forty inches in the mountains.

Almost all of the animals present in the Kutenai area were hunted as a food supply or for their hides, bones, etc. Their were numerous varieties within the environment and animals some distance from this region were also exploited.

It was during their subsistence practices that the two major divisions among the Kutenai tribe were most evident. The tribe was divided into two groups, the Upper and the Lower Kutenai. The latter lived a considerable distance to the west of the former and therefore had to cope with a slightly different environment. These differences will be described below. Emphasis is placed, however, on the Upper Kutenai as this is the group that inhabited the area from which our archaeological data was collected.

Hunting

While it is believed that the white tail and mule deer did not occupy all areas of the Kutenai range continuously, they were present in sufficient quantity to be deemed economically important. In late summer the Upper Kutenai used the communally organized fire surround as their primary means for hunting deer. The Lower Kutenai apparently never employed this method as it was most effective during the

months in which they were engaged in extensive fishing activities.

The deer drive, also communally organized, was used by both the Upper and Lower Kutenai. These were usually conducted in late February following a period of sufficient warmth to cause the melting of snow. The drive was conducted after it again became colder and a crust was formed from the water of the melted snow on the remaining snow. The crust hampered the movement of the deer thus facilitating the job of the bowmen who were to shoot the game as it was driven toward them. The entire operation was in the charge of one individual. He had the authority to expell any man from the camp who would not cooperate fully. A drive was held every day until the available game supply was exhausted, usually for a period of approximately two weeks. The leader was responsible for dividing the meat equally among the hunters. Most often one deer had to be distributed among two or three families. This meat was usually for immediate consumption and was prepared by the women who accompanied their husbands on the drive. Subsequent drives were held in different localities to secure meat for future use.

At the conclusion of the deer drives in early March, the main camp broke up into small family units that moved to separate camps along the Kootenai River. At this time game was scarce and Indians ate dried foods. Some individual hunting was attempted during this period, often with the aid of dogs.

Deer hunting during the warmer seasons of the year was usually an individual enterprise except where the fire surround was employed. A hunter stalked and killed deer with a bow and arrow, approached them by canoe, or sometimes disguised himself to get within bowshot.

Elk could be hunted during any season. The meat, however, was

said to be best in late summer and early fall. The optimum elk season corresponded with a loss in sweetness in the taste of the stamen of the Indian paint brush flower. This was used by the Kutenai as an indication of the time to commence hunting elk. Although hunting parties travelled together, and an elk drive was sometimes used, most elk were taken individually. Often an elk call made from wild rhubarb stalks was employed.

There were no, or few, bison within Kutenai territory, yet the bison provided a large portion of thei annual meat intake. Bison hunting was primarily an Upper Kutenai occupation. The Lower Kutenai only adopted this practice after the introduction of the horse and even then just made one annual trip to the Plains for the hunt while the Upper Kutenai made three. Before the advent of the horse, according to Schaeffer, the Upper Kutenai made only one annual buffalo hunting trip to the Plains. This occured during the winter when game was scarce in their region. They would cross the Continental Divide on snowshoes and hunt the bison that moved to the favorable winter grazing areas on the Eastern slopes of the Rocky Mountains. Methods of hunting bison varied. However most authorities agree that the actual kill was usually an individually conducted enterprise.

An interesting bit of information quite pertinant to this study is associated with the Kutenai word for buffalo, iya/mu. This term also designates cattle and game. Most animals with which the Kutenai had contact were given specific names. However the word cannot be reduced linguistically, a phenomenon indicating considerable age for the word within the Kutenai language (Sapir 1949). This may simply indicate that the Kutenai had a general word for game of which, when they came

into contact with, first, buffalo, and later, cattle they simply transferred or extended the meaning. It should be noted that there is a specific term for buffalo drive, ᵃa kuqɨ a taak. That there is a specific term for a function related to a particular animal when there is also a generalized term for the function that can be related to any animal is, to Sapir, an indication of great age within the culture for the particular practice.

The Kootenai River area was inhabited by both the black bear and the grizzly bear. While the grizzly was of primarily religious significance, the black bear was of definite economic importance. Its meat and grease were eaten, the hide,claws,and teeth also served important functions. Generally, because of its supernatural power, the bear was never taken in an organized, specifically designated bear hunt. Ostensibly, they were only killed as a result of an accidental meeting. Bears were usually captured in a deadfall or shot with bow and arrow (Schaeffer 1966:10,11).

Bird hunting among the Upper Kutenai was an informal affair. Cranes, ducks, sea gulls, eagles, fool hens, and geese were taken when available. The Lower Kutenai being more distant from the bison supply that comprised a major portion of the Upper Kutenai diet, had to rely on bird life as a major subsistence item. The hunting of water fowl was organized on a communal basis and under the strict supervision of a chief.

Fishing

As with bird hunting, fishing, although practiced by both the Upper and Lower Kutenai, was of primary economic importance for the Lower group. Of the many varieties of fish found within the Kutenai range,

trout, charr, whitefish, sucker, sturgeon, and salmon were the most often sought as food. The smaller of these were usually caught with the aid of weirs traps or nets. The use of these implements was a communal affair directed by a supernaturally endowed individual. Each day's catch was divided equally among participating families.

The Kutenai travelled to the headwaters of the Columbia River during August and September to fish for salmon during their spawning season. Weirs, nets, or harpoons were used to take salmon.

While the importance of fishing in both Kutenai groups is deemphasized in relation to the importance of hunting, it often provided a major portion of their protein supply. Similarly, practices related to the gathering of edible vegetable matter were not deemed as essential as hunting, yet often the majority of a winter's subsistence was provided almost entirely from vegetable products.

Gathering

There was a significant amount of edible plant products available to the Kutenai. Wild berries were abundant along the Kootenai River and its tributary streams. The principal varieties, service berries and chokecherries, were picked by the women during the summer fishing season. A large portion of these were dried and stored for winter consumption. Other fruits processed for later use were huckleberries, elderberries, and Oregon grape, while raspberries, thimble berries, goose berries, strawberries, blue berries, black berries, willow berries, silver berries, rose lips, and bull berries were eaten fresh. Currants, bear berries, prickly pears, and rhubarb stalks were cooked and eaten.

Camas and bitter root are believed not to have been eaten by the Kutenai until the time of the introduction of the horse when southern

Salishan speaking neighbors introduced the practice. They have since become principal sources of vegetable matter in the Kutenai diet. This primarily is because bitter root and camas bulbs can be stored. Both occur frequently in the Kutenai territory although bitter root appears to be the more abundant.

The gathering of bitter root began in early May. It was a communal affair for the women of the band in the charge of an elderly woman. Those participating in the gathering activities secured the bitter root for their own families. Preparation of the bitter root for winter storage involved only the peeling of the roots and drying them in the sun.

The camas gathering season followed immediately after that of the bitter root. Camas was gathered in a manner similar to bitter root. It was generally roasted in a pit in layers interspersed with tree moss.

Discussion

As the interpretation section of Schaeffer's dissertation (1940: 49-62) deals directly with the problem of this thesis a summary of his evaluations will be presented.

Schaeffer feels that while the Kutenai economy has undergone certain environmental adaptations, it possesses certain basic features that bear relationships to particular areas. Most basic to the Kutenai economy is their river orientation. Schaeffer feels that the river regulated all of the Kutenai's subsistence activities. This he feels is a typical northern forest economic pattern, characterized by seasonal movements between winter hunting and summer fishing areas. The more temperate climate occupied by the Kutenai allowed fishing activities to be carried on throughout the year. This annual fishing emphasis is most directly related to present Salish groups, however, Schaeffer postulates

a more northern provenience for these people too.

Schaeffer sees the annual buffalo hunts as being southern in origin taking their form from Shoshone and southern Salishan influence. Associated with the bison hunting practices was a migration pattern of seasonal moves from one environment to another. In this Schaeffer sees a relationship to the Blackfeet, Plains Cree, and Sarsi.

He feels the hunting complex is more directly related to that common on the interior Plateau, but that this may be the result of environmental, rather than cultural relationship. The game drive on snowshoes is particularly typical of Plateau tribes, but the allotment of game, Schaeffer claims, is due to recent Plains influence. Similarly, the fire surround is characteristic primarily of the Plains area. Yet while there are relationships to the south, west, and east, Schaeffer asserts the evidence is overwhelmingly in favor of a northern origin for the hunting practices of the Kutenai.

> A number of traits of the Kutenai hunting complex while present among other adjacent Plateau groups, are suggestive of a more northern provenience. Such general aspects as the Kutenai dependence on large game animals and the adaptation of hunting to winter conditions should be mentioned first. Others include rousing of game toward runways in the fall; and into snowdrifts, or stretches of ice-free water, and upon the frozen surface of rivers or lakes in winter; the pursuit of game on snowshoes; dogs as hunting associates; the still hunt in a canoe; a vague concept of individual hunting territories, and game conservation; the collection of animal trophies; sacrificial offerings of animal parts; use of magical preparations to bring game; decoying game by voice and mechanical devices; samson-post deadfall; beaver taken by dogs; and speared; spring-pole, pole and tether snares for small game. (1940:55).

Procedures in use for the procurement of wild fowl are seen to be similar to techniques in use among Puget Sound cultures, Plains, Southwest, Basin, Plateau, and California.

The fishing complex, according to Schaeffer, is most paralleled in the Northern Plateau. Variations among the Kutenai are attributed to local adaptation. The use of the canoe in certain fishing endeavors is associated with practices of the northern and eastern forest areas.

In vegetable gathering techniques relationships are closest to immediate southern and western neighbors. The presence of some of these traits among the Blackfeet are, according to Schaeffer, a result of diffusion from the Kutenai. Conversely, tobacco growing practices, he claims, were diffused from the Blackfeet to the Kutenai. He notes, however, that there is an occurence of similar practices among the Thompson, Wishram, and other Plateau groups that may have influenced the Kutenai usage.

The Kutenai are again suggested as the agent of diffusion for the pit roasting techniques used by the Blackfeet and Kutenai. Similarly the emphasis placed upon the boiling of meat and vegetable matter are not Plains traits. This is also true, according to Schaeffer, of such traits as seasoning food with animal fat, using tainted food as an appetizer, making pemmican without berries, cracking animal bones for oil, eating tree moss and inner bark, sacrificial eating of dog flesh, and the storage of food in caches.

Schaeffer concludes his comparative section by noting that most Kutenai subsistence traits relate primarily to those of the Thompson, Shuswap, and Flathead, with a numerically smaller relationship of traits to the Plains. This he attributes to the geographic position of the Kutenai with cultural diffusion and environmental adaptation being the primary motivating factors. However, when these factors are considered,

the remaining and fundamental characteristics of Kutenai economy are typical of the Northern Athabaskan and Algonquian cultures.

Schaeffer sees the Kutenai as having resided in an area far to the north of their present locale and migrating south over a period of years for primarily economic reasons. He suggests the Rocky Mountain Trench as one possible route through which the Kutenai may have travelled.

In an attempt to examine Schaeffer's hypothesis and in an attempt to offer a more controlled comparison and yet remain within the scope of the present study, a consultation was made of data present in Murdock's "World Ethnographic Sample". Thirteen tribes were selected for comparison based on geographic location and availability of data. The objective was to form a circle of tribes around the Kutenai habitat. No groups closer than five hundred miles from the Kutenai were used . This was done so similarities cannot simply be explained as resulting from diffusion or economic adaptation to the same environment. Where possible a tribe at approximately five hundred miles and one at eight hundred miles, both removed in the same general direction, were used. This is to allow a migration of varying distance for the Kutenai. Only traits related to subsistence were compared and no attempt was made to eliminate contradictions that might appear between Murdock and other data for the same tribe. Murdock's material and the symbols used appear as they are listed in Coult and Habenstein (1965).

As can be seen from Table 1 the Cree and the Tlingit most resemble the Kutenai in subsistence practices. Both of these groups are located by Wissler (1917) as having resided in prehistoric times some distance to the north of the Kutenai, the Cree directly north and to the northeast, and the Tlingit to the northwest. The Nootka to the

west and the Shoshone to the south are the next most closely related groups on the basis of this table.

TABLE 1

COMPARISON OF SUBSISTENCE TRAITS

Tribe	Column 24	25	26	27	28	Number of Related Traits
Kutenai	1	2	3	1	2	
Alsea	1	-	3	-	6	2
Carrier	2	3	2	1	2	2
Cree	1	2	3	1	2	5
Mandan	3	2	3	2	6	2
Menomenee	3	2	1	1	6	2
Nootka	1	3	3	1	6	3
Ojibwa	3	-	1	1	2	2
Paiute	8	2	1	1	2	2
Pawnee	9	9	3	3	2	2
Shasta	3	3	1	1	6	1
Shoshone	8	2	1	1	2	3
Slave	3	3	2	2	2	1
Tlingit	1	2	3	1	2	5

Key to Table 1:

Column 24. Fishing, Shell Fishing, and Marine Hunting.
1. Dominant.
2. Codominant.
3. Important.
8. Present.
9. Absent.

Column 25. Division of Labor, Fishing, Shell Fishing, and Marine Hunting.
2. Males conduct the activity.
3. Both sexes participate, males share greater.
9. Activity absent, unimportant, or recent.

Column 26. Hunting and Gathering.
Code numbers same as Column 24.

Column 27. Division of Labor, Hunting and Gathering.
1. Men hunt, women gather.
Remaining code numbers same as Column 25.

Column 28. Settlement Pattern.
2. Seminomadic communities.
6. Compact villages or towns.

CHAPTER V

SOCIAL ORGANIZATION

In a locale such as that inhabited by the Kutenai, archaeology seldom reveals pertinant information concerning social organization. The converse, that data concerning social organization seldom illuminates archaeological findings, is also true. However, in a study such as this where any sort of data is limited, even the small amount of information that may be applied to archaeological findings from the social organization of the Kutenai should be noted. Not all of the data presented in this chapter is felt to pertain to the archaeology. That which does not is included as social organization, particularly kinship, is an aspect of culture in which the data is highly comparable, and therefore applicable to the problem at hand. I will simply attempt a preliminary delineation of Kutenai social organization traits and a preliminary comparison.

Kinship System

While most authorities agree that descent is reckoned bilaterally among the Kutenai, there is some controversy as to the nature of the system, and, in fact, one authority (Chamberlain 1905:186) believes that the system is matrilineal. In my attempt to determine the nature of the Kutenai kinship system I have reviewed all available publications dealing with this aspect of Kutenai culture.

Morgan (1871:391-482) presents a partial list of kinship terms

in use by the Kutenai that were collected in 1860. Bilaterality is evident in his description in that neither lineage appears to be emphasized, nor do there appear to be any special terms directed to a relation in one lineage that does not also occur in the other. For instance, father's brother is called stepfather and, correspondingly, mother's sister is described as stepmother. Cousin terminology may be of either the Hawaiian or Iroquois system as defined by Shusky (1965:20). With insufficient data the distinction cannot be made as only parallel cousins are described by Morgan. The Hawaiian system classifies all cousins as brother and sister while the Iroquois system does so only for parallel cousins.

The terminology reported by Morgan is recorded as being the same for male and female ego. No reciprocal terms are apparent in any of the terminology. Sex distinctions are evident only for ego's generation and the first ascending and descending generations.

The material reported by Morgan is to a large extent contradicted by Boas (1919) and Sapir (1918). Sapir remarked that one of the unique features of Kutenai kinship was the emphasis put upon different terminologies used by male and female speaker. Similarly, Boas was aware of this while also noting that the most characteristic feature of the system was an extended use of reciprocal terms. Both maintain that sex differentiations extend to the second ascending and descending generations. Both Boas and Sapir agree that the Kutenai kinship system is bilateral.

Turney-High states that the Kutenai system is one of bilateral inheritance with patrilineal emphasis. This he feels is evident in that the chieftainship passed from father to son (1941:134).

Murdock (1949:277) sees the Kutenai kinship pattern as Patri-Eskimo, that is, bilateral descent, Eskimo cousin terminology, patrilocal residence, but feels that this pattern evolved from Normal-Eskimo. While Murdock also notes some emphasis on the patrilineage, he sees the system as having developed from a strictly bilateral prototype. It is interesting to note that Murdock only classifies three other societies within one thousand miles of the Kutenai as having a Patri-Eskimo system that developed from a Normal-Eskimo system. These are the Quinault of the Oregon coast and the Chukchee and the Koryak of Siberia. The latter two are particularly provocative when one considers Mason's claim of the similarity between the Kutenai canoe and that found on the Amur River of Siberia (1889).

The presence of the levirate among the Kutenai is attested to by all investigators with the exception of Boas (1919:101). Boas does not negate its existence but feels that indications to the presence of the levirate in kinship terminology may actually be associated with another phenomenon. Ray (1945:213) appears to be the only authority to acknowledge the existence of the sororate among the Kutenai. He notes it both in the usual form, after the death of one's wife, and claims that it also may be practiced as a form of sororal polygyny.

Also agreed upon by most observers is the presence of the mother-in-law tabu. Boas (1918:279) relates a myth which states that the mother-in-law tabu not only was in practice at a time contemporaneous with the circulation of the myth but that it was a very old custom that was practiced in a more extreme fashion "long ago". The mother-in-law tabu is most characteristic of the Great Plains tribes (Lowie 1963:85), although it appears in other areas. In the light of this myth

it is more difficult to explain the presence of this Plains trait in Kutenai culture away as the result of recent extended contact between the Kutenai and Plains tribes. The myth states that the tabu was prevalent among the Kutenai for a significant enough length of time that an early association with the Plains would be necessary if the myth reached the Kutenai from this area. It is interesting that Ray's (1945:214) rendition of the tabu indicates even more similarity to the Plains. The tabu appears to have been in practice among the Kutenai in the manner characteristic of the Plains where there is a complementary father-in-law tabu. Also interesting is the fact that in Ray's comparison of all Plateau tribes (including the Kutenai), the Kutenai are the only group on the Plateau to possess the tabu in any fashion. The mother-in-law tabu is also rather extensively practiced to the south of the Kutenai (Gifford 1941, Steward 1941,1945, Stewart 1941).

Turney-High suggests the presence of a bilateral formalized avuncular relationship (1941:46) with no significant difference between mother's brother and father's brother in their relationship with ego. This is not evident in the kinship terminology presented by Boas. The term for father's brother is xa which may be glossed as uncle. Mother's brother is designated by the term xa'tsa. While the xa glosses as uncle, tsa is the term younger brother uses to designate older brother. This would indicate an importance assigned to mother's brother that is not associated with father's brother. The terminology presented by Turney-High assigns mother's brother the term ka'tsakati which appears to be the same term as that used by Boas. Unfortunately Turney-High does not give a term for father's brother to allow a comparison between the two terminologies. Morgan doesn't include a term for mother's brother in

his work. Thus a comparison of the three available terminologies cannot resolve the problem.

Marriage

Marriage practices among the Kutenaiappear to have been very informal. Choice of mates was primarily the decision of prospective spouses although parental and avuncular approval from both sides was desired. It seems that the only ceremonial aspect attached to marriage was a housewarming after the couple had established themselves. Divorce was common and easily attained by either spouse. Polygyny was sometimes practiced.

Residence

Descriptions of residence practices as they occur in the available literature are most contradictory. Chamberlain (1892:557) believes residence was patrilocal, Turney-High feels it was matrilocal directly after the marriage and after one or two years, neolocal or uxorilocal. Murdock is noted above as believing residence was patrilocal, however, in his "World Ethnographic Sample" he designates residence as uxoribilocal (Coult and Habenstein 1965:539). Ray (1945:211) assigns to the Kutenai a final residence pattern of matrilocality and does not concur with a differing initial residence. Uxoribilocal residence appears to be the most likely form of residence to have been practiced by the Kutenai. This would indicate an initial residence with the bride's family followed by a final household that may be with the kin of either spouse or neolocal. Neither Ambrose Gravelle nor Joe Dennis were able to clarify this problem although they strongly intimated a matrilocal or uxorilocal residence practice.

Chieftainship

When attempting to describe the nature of the Kutenai chieftainship an immediate problem arises. There was a marked difference between the Upper and Lower Kutenai in the form of this institution. While we are following Schaeffer in assuming that the Tobacco Plains Kutenai are the most likely to be near the tribal prototype, these differences must be noted.

Turney-High (1941:146-149) ascribes three specific chiefs to the Upper Kutenai, the Head Chief, the Economic Chief, and the War Chief. All three of these had specific functions, but the War Chief was the most important. It was he who was indicated when one spoke of the "Chief". His position was hereditary through the patrilineage. According to Turney-High, this is an ideal statement and actually he was most often appointed on the basis of prestige by a council of honorary chiefs. The presence of honorary chiefs, incidentally, is a trait almost unique to the Plains. All authorities agree that each band had a chief and that there was no overall tribal chief. There is a reference by George Simpson (1847:86) who reported that he encountered one Kutenai band which had a female chief. A bit of substantiating information may be Schaeffer's reference (1966b:6) to the presence among the Kutenai of a female berdache who had a signifcant amount of power.

Chieftainships among the Lower Kutenai were more formally organized than those of the Upper group. The concept of the honorary chief was entirely absent and, in fact, despised by the Lower Kutenai. Similarly, the inheritance of the chieftainship, or appointment of a chief through a council was absent. Chiefs were elected by a popular vote and the candidates were chosen purely on the basis of ability. There

were five chiefs in each Lower Kutenai band and each of these had a specific economic function. Here the War Chief held a subordinate position to the Band Chief. The Fish, Deer, and Duck Chiefs were subordinate to these two except when their function was in operation (Turney-High 1941:151,152).

Band

The band appears to have been the basic unit of Kutenai society. While tribal identity was definitely present it appears to have been maintained primarily as a result of combined buffalo hunts and the Sun Dance. Most scholars identify at least eight bands of Kutenai during the early historic period. These were divided equally between the Upper and Lower Kutenai. If we accept Mooney's (1928) estimate of the Kutenai population at the time of white contact as approximately one thousand individuals, we might assume the average band would have consisted of slightly over one hundred people. As previously mentioned, these would have disbanded in the cold winter months into small family groups. Only one authority disagrees with the presence of the band in aboriginal Kutenai social organization. Oscar Lewis (1942:59) in his work on the Blackfeet, feels that the Kutenai only adopted band organization after the introduction of the horse in order to have more adequate defenses against raiding Plains tribes.

In an attempt to make a preliminary comparison of the data on social organization of the Kutenai several surrounding tribes were chosen as they were in Chapter IV. The results of Table 2 are suprising in that the group with the highest number of related traits to the Kutenai is a Great Basin group, the Paiute. Another Great Basin group, the Shoshone, also have a relatively high number of similar traits. It is realized

that there are far more dissimilarities between these Basin groups and the Kutenai then there are similarities, yet any positive evidence should be considered. The Alsea, the Cree , and the Slave also show a high enough relationship to warrant further investigation.

TABLE 2

COMPARISON OF SOCIAL ORGANIZATION TRAITS

Tribe	Column	29	30	31	32	33	34	35	36	37	38	39	40	41
Kutenai		6	4	4	2	4	2	4	3	6	9	4	9	4
Alsea		3	3	6	1	0	4	0	3	1	9	4	9	4
Carrier		2	3	6	4	0	1	4	4	1	9	4	4	2
Cree		2	1	3	1	4	4	0	4	2	9	4	9	4
Mandan		-	3	6	4	0	4	0	4	6	9	-	5	2
Menomenee		4	1	-	1	0	1	0	1	6	4	2	9	4
Nootka		3	4	7	1	0	4	0	4	4	9	4	9	4
Ojibwa		2	1	3	1	4	4	0	1	2	3	2	9	4
Paiute		2	1	3	2	4	2	4	4	2	9	4	9	4
Pawnee		1	4	5	4	0	1	4	4	6	9	4	9	4
Shasta		3	3	6	1	0	4	0	3	1	9	4	9	4
Shoshone		3	1	4	4	0	1	0	3	6	9	4	9	4
Slave		2	1	3	4	0	4	0	4	2	9	4	9	4
Tlingit		4	3	6	5	0	5	0	3	6	9	4	5	2

Tribe	Column	42	43	44	45	46	47	48	49	50	51	52	53	54
Kutenai		2	4	9	6	0	3	1	2	2	3	6	4	7
Alsea		2	2	9	6	0	3	5	1	2	3	6	4	7
Carrier		5	2	1	4	0	3	5	1	2	2	1	2	1
Cree		2	2	9	6	0	3	1	7	2	3	6	2	1
Mandan		5	-	-	7	0	1	2	7	4	3	5	0	0
Menomenee		1	2	9	1	0	1	1	5	3	1	3	4	7
Nootka		2	4	7	6	0	6	4	1	4	1	1	4	7
Ojibwa		1	2	1	4	0	3	1	7	2	3	6	2	1
Paiute		2	4	9	6	0	3	1	7	2	1	3	4	7
Pawnee		2	2	9	7	0	1	4	2	4	1	1	4	7
Shasta		2	4	7	4	6	3	3	2	4	1	2	4	7
Shoshone		2	2	1	4	0	3	1	7	2	3	6	2	1
Slave		2	2	9	6	0	3	1	7	2	3	6	4	7
Tlingit		5	1	2	7	0	3	5	1	2	2	1	1	2

TABLE 2--Continued

Tribe	Column 55	Number of Related Traits
Kutenai	2	
Alsea	2	16
Carrier	3	6
Cree	2	15
Mandan	3	4
Menomenee	1	7
Nootka	2	12
Ojibwa	1	9
Paiute	2	19
Pawnee	2	14
Shasta	2	13
Shoshone	2	15
Slave	2	16
Tlingit	3	7

Key to Table 2:

Column 29. Community Organization.
1. Demes.
2. Agamous communities.
3. Exogamous communities.
4. Clan communities.
6. No clans, no evidence on endogamy or exogamy.

Column 30. Family Form.
1. Independent families.
3. Lineal families.
4. Extended families.

Column 31. Household.
3. Polygamous family households.
4. Nuclear family households.
5. Stem family households.
6. Lineal family households.

Column 32, 33. Marital Residence.
10. Patrilocal.
14. Uxoripatrilocal.
24. Uxoribilocal.
40. Matrilocal.
50. Avunculocal.

Column 34, 35. Alternative Residence Patterns.
Code numbers same as for Column 32, 33.

Column 36. Marriage.
1. General polygyny.
2. Non-sororal polygyny.
3. Limited polygyny.
4. Sororal polygyny.

Column 37. Property Considerations at Marriage.
1. Bride price.
2. Bride service.
4. Gift exchange.
6. Absent.
Column 38. Patrilineal kin groups.
3. Sibs.
4. Phratries, moieties absent.
9. Absent.
Column 39. Patrilineal Exogamy.
2. Sib exogamy.
4. Marriage with patrilineal parallel cousins forbidden.
Column 40. Matrilineal Kin Groups.
4. Phratries, moieties absent.
5. Exogamous moieties.
9. Absent.
Column 41. Matrilineal Exogamy.
2. Sib exogamy.
4. Marriage with matrilineal parallel cousins forbidden.
Column 42. Bilateral and Bilineal Kin Groups.
1. Patrilineal descent.
2. Bilateral descent.
5. Matrilineal descent.
Column 43, 44. Cousin Marriage Rules.
12. Patrilineal cross cousin marriage.
21. Symetrical cross cousin marriage.
29. Cross cousin marriage forbidden.
47. Second cousin marriage forbidden.
49. Marriage forbidden with known consanguineal kinsman.
Column 45, 46. Cousin Terminology.
10. Omaha cousin terminology.
40. Iroquois cousin terminology.
60. Hawaiian cousin terminology.
70. Crow cousin terminology.
Column 47. Bifurcation and Collateralization in the First Ascending Generation.
1. Bifurcate merging avuncular terminology.
3. Bifurcate collateral avuncular terminology.
6. Lineal avuncular terminology.
Column 48. Social Stratification.
1. Absent among freemen.
2. Formal age grades.
3. Wealth distinctions.
4. Complex stratification.
5. Hereditary aristocracy.
Column 49. Social Stratification (Slavery).
1. Hereditary slavery.
2. Incipient or non-hereditary slavery.
5. Slavery reported but status not known.
7. Absent or near absent.
Column 50. Political Intergration.
2. Autonomous local communities.
3. Peace groups.
4. Minimal states.

Column 51, 52. Succession.
- 11. Patrilineal succession, son preferred to younger brother.
- 12. Patrilineal succession, younger brother preferred to son.
- 13. Patrilineal succession, preference unspecified.
- 21. Matrilineal succession, sister's son preferred.
- 35. Non-hereditary succession, election or concensus.
- 36. Non-hereditary succession, informal or personal influence.

Column 53, 54. Not described in Coult and Habenstein (1965).

Column 55. Descent.
- 1. Patrilineal.
- 2. Bilateral.
- 3. Matrilineal.

CHAPTER VI

RELIGION *

Both Boas and Chamberlain classify the religion of the Kutenai, in its aboriginal form, as a kind of sun worship. They claim that the sun was approached as if it were an all-powerful diety. Prayers were directed specifically toward the sun and sacrifices were made to it. Finger joints were cut off and other body mutilations performed. Both also claim that in the past the life of the first born child was sacrificed to the sun. At death the Kutenai believe they will go to the sun where they remain until their return to the earth at Lake Pend d'Orielles (Boas 1889:842-848, Chamberlain 1905:186). It is difficult to determine if these assertions are based on the presence or lack of presence of knowledge on the part of the investigators concerning the Sun Dance. Practices related to the Sun Dance have often been misinterpreted as indicating sur worship. No subsequent works on Kutenai religion by any other authority support the above.

Spirits

That the Kutenai believe in spirit beings is attested to almost unaminously. There is some controversy as to the meaning of the term nipika or nupeeka applied to these spirits. While some maintain that this referred only to spirit beings, others believe that it also includes

---

* Information in this chapter appears originally in Ray (1945:234-255). Other sources will be so noted.

in its meaning supernatural power similar to mana. The term for shaman, nipikaka, obviously derives from nipika and is glossed as one who deals with spirits (Chamberlain 1905:186).

Any spirit being could become an individual's guardian spirit. Ray describes these spirits as being of any animal, insect, or bird, from rocks, lakes, water, mountains, trees and other plants, from whirlwinds, thunder, clouds, fire, heavenly bodies, or from fabricated objects. Certain of these were more common than others, and certain were consistently possessed of more or less power. Turney-High (1941: 170) disagrees with the idea that spirits may come from so wide a variety of sources. He maintains that with the exception of "Old Man" they are all theriomorphic. While their true shape is animal they may appear in human forms.

The power conveyed by particular spirits was always correlated to the nature of the spirit. This concept, according to Ray, is almost entirely absent on the Columbia Plateau, present only among the Tenino in central Oregon. The various powers conveyed allowed the recipient to control weather, to be clairvoyant, to find lost objects, or to become a shaman, a warrior, or a hunter.

Among the Kutenai every boy and some girls were sent out on a quest for a guardian spirit at a minimum age of ten years. The individual was sent out by his father, sometimes as a form of punishment. He went alone and could leave his home for the quest during any season and at any time of the day or month. The spirit seekers were often sent out during storms entirely naked, a practice similar to that of the Plains. Usually he had a specific destination and had to follow prescribed procedures, such as bathing and smudging his body.

Usually an individual left on his quest with an amulet that would either convey power or assist him in obtaining power. This could be given to him by his parents or by an old man. The vigils were for extended periods of time usually lasting for several days. It appears that the minimum amount of time spent on a vision quest was one day, and seven days the maximum at which time the quest should have been successful. The site of the quest might beve been at a body of water, a mountain, a cave, an unfrequented spot, a prarie, or at a location believed to have been frequented by spirits. Lasso Stasso claims many Kutenai would lie in a stone circle on Chief Rock at Dayton, Montana as it was often occupied by spirits (Malouf and White b:3). Activities practiced by the Kutenai during these vision quests involved keeping alert, diving into cold water, sweating, and fasting.

When the spirit appeared it came as a vision or during a dream. It explained its origin to the novice and the power it was conferring. A symbol was given to the individual that was a token of the spirit's power. A song was also given to the novice that had to be immediately learned. During this process the spirit entered the body of the individual through an opening in his body that would, from this time, be sacred and which when touched would summon the spirit. This idea of possession by the spirit is unique to the Kutenai among Plateau tribes, and does not appear to be present among Plains tribes (Lowie 1963). A cursory glance at literature dealing with tribes to the south, north, and far west of the Kutenai indicates that this may be a unique trait (Barnett 1939a, Birket-Smith and De Laguna 1938, Driver 1939, Drucker 1963, Gifford 1941, Jenness 1955, Steward 1941, Stewart 1941).

Upon returning from his vision quest the Kutenai had to observe a sleep tabu for one day. This practice is shared only with the Flathead among Plateau tribes. The success of the novice was not broadcasted as his proctor was aware without being told. There were certain restrictions placed upon the revelation of power by the individual and failure to abide by these could bring punishment, diminuation of power, or death. The power was not explicitly revealed but rather was made known by the individual's accomplishments.

Shamans

The acquisition of power for shamans was identical to the means through which a layman acquired power. There were, however, specific shamanistic spirits. Either male or female could become a shaman although the former were more numerous. Female shamans were almost always particularly powerful.

Kutenai shamans could be malevolent although they seldom were (Turney-High 1941:173). The power of the shaman characteristically declined with age, a fairly common Plateau trait. They received no set fees, and gifts for successful cases were entirely optional on the part of the client. A shaman carried on public as well as private duties. When a new camp was set up the shaman had various ceremonial functions to perform. During times of war he was called upon to steal spirits from the enemy.

Curing services were solicited through messengers, relatives, or the shaman's wife. The latter is characteristic only of the Kutenai on the Plateau. The shaman retained the right to refuse any call. Conversely, he could volunteer his services, but only after visiting the patient. Usually an audience of friends and relatives of the patient

was present when the shaman arrived. In cases not the result of an accident, treatment was usually conducted after dusk.

Singing by the shaman and his audience were integral parts of the curing ceremony. Oftne the patient was smudged and massaged by with spiritual objects. Sickness was usually removed through the head although it might go out through any portion of the body. Often it could only be removed in parts.

The sucking process was often employed by Kutenai shamans. A tube was applied directly to the wound or at a point indicated during the diagnosis. This was often followed by the shaman falling helpless to the ground and, at times, being beaten by the audience. The intrusive object was spit into the hands of an assistant, and held over smudge.

Blanket shamanism was the most common practice in use among the Kutenai. This involved the shaman performing various acts behind a blanket hung in a lodge. It could be used for curing, predicting, locating lost objects, and various other ends. Turney-High (1941:174) notes that the Kutenai believe that this technique was originated by them, and any other tribes possessing the trait have it as a result of diffusion from the Kutenai. It is entirely absent among Plateau tribes and seldom found elsewhere. The Ojibwa and the Eskimo seem to possess a form of this type of shamanism.

Magic

Magic was practiced by the Kutenai in several forms, and for several purposes. When used to cause illness it could be manipulated by any individual. Formulas used were revealed by a spirit and could be transferred or sold. The Kutenai also used love magic and hunting

magic. The latter appears to be absent on the Plateau. Weather magic was practiced either to bring rain or cause a weather change.

It appears that prophesies of the future could be attained by examining the hands of the dead (Boas 1889:842). There was a significance attached to the number of closed fingers on the hands of the deceased, or on objects found in them. If beads were present, good fortune was indicated, if meat, food would be abundant. If the hands of the corpse were so tightly closed that they were unable to be opened, it meant that the tribe would be strong and healthy (McClean 1896:141).

An interesting religious belief recorded by Schaeffer (1966a:11) as being common to the Kutenai was that hunting dogs could attain supernatural power. They were fed particular foods or had their heads thrust into the open carcass of a freshly killed bear. Also of interest to this thesis is the point brought out by Schaeffer that the Kutenai used saliva as an amulet for good luck in hunting, a trait found only among the Eskimo.

Ceremonies

The Kutenai had numerous religious ceremonials. The most important of these was the Sun Dance. This is a typical Plains trait that appears only among the Kutenai of all tribes on the Plateau. Although the Plateau Guardian Spirit Dance bears a significant resemblance to the Sun Dance. The Sun Dance appears to have been primarily of economic importance. While success in hunting was a significant aspect of the ceremony, it had a much more specifically economic effect. It served as a means for the redistribution of wealth. On the last day of the ceremony the Sun Dance Chief was given lavish gifts, usually horses and food. These in turn were given by the chief to those of the lowest wealth.

Another effect of the Sun Dance, and perhaps the most significant, was that it helped in maintaining a tribal bond between the Upper and Lower Kutenai. This was the only occasion during which these two divisions were consistently together and may easily have been a primary factor in maintaining tribal identity.

Another important ceremony, the Fir Tree Rite, was held only during times of severe economic crisis, usually when there was a marked absence of deer thought to be the result of the workings of a hostile shaman. This may be related to Schaeffer's assertion that Salishan shamans would at time cause the deer in Kutenai territory to become invisible (1940:22). Under the direction of a group of shamans, a fir tree was set up in the center of a long house. Members of the band y thought to have strong supernatural powers were sent by the shamans to locate deer. The ceremony, usually successful, served as a test of the supernatural powers of the shamans and participating hunters (Turney-High 1941:186).

The Grizzly Bear Ceremony was practiced by both the Upper and Lower Kutenai. Its primary purpose was to propitiate the grizzly bear spirit and persuade him to aid and protect men while hunting and women whil gathering.

Schaeffer (1966a) compiled a table (modified in Table 3) comparing the Kutenai bear venerative traits to those of several other tribes. The high degree of similarity between Kutenai and Ute traits is particularly provocative in the light of the results presented in Figure 2, Chapter V where a high correlation between the Kutenai and the Paiute is seen in traits of social organization.

TABLE 3

COMPARISON OF BEAR VENERATIVE TRAITS

Venerative Trait	Kutenai	Blackfeet	Assiniboin	Cree	Ute
Ceremony gift of bear.	x	x			x
Given in dream.		x	x	x	x
Bear Helper tale.	x	x			x
Performance sanctioned.					
In dream.	x		x		x
Ceremony in spring.	x	x			x
At first thunder.	x	x			x
Connection of bear and thunder.	x				x
Centralization of ceremony.	x		x	x	x
Purpose to conciliate bear.	x		x	x	x
To arouse from hibernation.					x
For warfare and curing.			x	x	
Ceremony in tipi.	x	x	x	x	
In brush pole enclosure.					x
Structure symbol of den.	x	x	x		x
Deer hoof rattle.	x				
Rasp resonator.					x
Dancers mimic bear.	x	x	x	x	x
Tobacco offered.	x	x	x	x	x
Berries served at feast.	x	x	x		
Non-performance punished by bear.	x				x
Total x denoting trait present with Kutenai.	15	9	8	5	12

x denotes presence of trait.

CHAPTER VII

MYTHOLOGY

In his discussion of Kutenai mythology, Curtis (1911:167) notes a presence of three distinct types of myths: those that show a relationship to the Plains; those that show a relationship to the Northwest; and those that are unique to the Kutenai. Boas (1918:281) in his editorial comments in Kutenai Tales, finds the same distinctions as Curtis. In discussing some of the more unique myths he notes a particular similarity in subject matter, and in the practice of welding myths into connected groups, between the Kutenai and the Plateau Okanogan. Hodge (1907:740-742) considers most of Kutenai mythology to be of Algonquian or Siouian origin. The only relationship he sees to the northwest is in cosmogonic legends. The only myths Baker (1955:13) deals with demonstrate relationships to the Northwest Coast. Curtis, Boas, Malouf (1952), and Schaeffer (1949) mention myths whose settings are west of the present Kutenai locale. Many of these do not appear to be borrowed from the tribes that would most logically set their myths in these areas. This is significant in that if these have not been borrowed from the inhabitants of these areas, the fact that they are set in these western locales would indicate that the Kutenai might have at one time lived there.

Claude Schaeffer (1949:14) deals with many Kutenai myths but investigates most thoroughly the "Wolf and Two-Pointed Buck" tale.

In his rendition of this myth, which occurs during the supernatural period, the setting is seen to be west of the Continental Divide. That this myth occurs in the supernatural period is significant in that it is less likely to have been altered to a locale corresponding to the present environment.

In this same publication, Schaeffer presents a rather provocative hint of a relationship that had not been considered by other investigators. He notes a mythological affiliation with the Algonquian speaking Deleware Indians of the Eastern United States. This association becomes more noteworthy when one is aware that there are also correlations between the Kutenai and the Deleware in methods of faunal classification, weather changing rites and divination practices.

Ambrose Gravelle related three myths to me during the course of our interviews. All of these were situated in the present Kutenai locale, two of them dealt with the supernatural period. In response to the direct question "Where did the Kutenai originate?", he related his version of the Kutenai creation myth. This story deals with the character Woodcock who battles Redstone and defeats him. From Redstone's body Woodcock creates man. The story is set where the present town of Rexford, Montana is situated, although during the myth the area was under water. It is interesting that Chamberlain reports an altogether different creation myth elicited from members of the same band to which Mister Gravelle belongs. Chamberlain's creation story asserts that the Kutenai were created and emerged from a deep hole in the ground east of the Rocky Mountains (1892:248).

The other myth related by Ambrose Gravelle that occured during

the supernatural period deals with a race participated in by a number of giant animals. The race began at Phillips Creek (near Eureka, Montana) and ended on the north shore of Flathead Lake. This tale accounts for the origin and naming of many land features between these two points.

The third myth, the "Dirty Pointer" story, deals with an event that occured while planting tobacco in the area of Tobacco Plains. It is significant in that the chief, who is the main character, is said to actually have existed, and that Ambrose Gravelle claims to be a descendant of this individual whom he is able to trace back through ten generations.

The Kutenai deluge myth is reported by almost all students of Kutenai mythology. Curtis (1911:146-148) and Clark (1966:144) relate the most commonly accepted version. The characters in the tale are all animals common to the Columbia Plateau and the setting offthe story is on the east shore of Columbia Lake.

Of the myths present in Ella Clark's Indian Legends from the Northern Rockies there are several that contain hints that relate to Kutenai occupation of particular areas. These include a Salish myth "Bluejay and the First Skin Tipi", in which there is a reference to the Kutenai who are included in the myth as having lived before the introduction of the horse in brush covered wickiups (p.100). In her discussion of Kutenai mythology Clark asserts that a hero of many Kutenai tales, Coyote, bears a strong resemblance to Old Man, the protagonist of many Blackfeet myths (p.140). A perusal of Boas' Kutenai Tales would seem to substantiate this claim.

Four of Clark's Kutenai myths may apply to the problem of this thesis. "A Visit to the Sky World" is one which the author claims dir-

ectly related to the Northwest Coast and Columbia Plateau where it is considered a characteristic myth (p.146). The Kutenai version of the story is set near Kutenai Lake. "The Painted Rocks Along Flathead Lake", another myth situated in present Kutenai territory, appears to be of recent origin as it it deals with an area the Kutenai are not believed to have occupied until historic times. However, in a footnote Clark states that there is another aspect to the myth often not included that occurs near Nelson, British Columbia (p.149).

Two of these four myths show some relationship to the Plains, although situated west of the mountains. "The Mysteries in Flathead Lake" is about a herd of buffalo living on the lake. According to the author the Blackfeet, Sarcee, and Nez Perce possess the same myth (p.151). A more provocative myth is "Why the Indians Had No Metal Tools". In this tale the spirit of the Sun Dance, Kukluknam, whose image is on the rocks near Elko, British Columbia, is traced to the east where he lives in the ocean (p.155). Whether this indicates that the Kutenai believe they recieved the Sun Dance from the east --diffusion from the Plains-- or if it instead implies a Kutenai residence to the east, perhaps as far as the ocean, is an unresolved question.

The most complete collection of Kutenai mythology appears in Kutenai Tales by Franz Boas (1918). Presented in the text are myths that were collected by Boas and Alexander Chamberlain in the late nineteenth and early twentieth centuries. Because this is the most inclusive as well as the oldest systematically ammassed collection of Kutenai mythological material, most attention was paid to this publication. There is a section in the book in which Boas presents abstracts of all the myths included in the text and others that he had published elsewhere.

In this section of the book footnotes indicate which other tribes present the same or related myths. A list will be presented at the end of this chapter including each tribe, its location, and the number of related myths as recorded by Boas. It is understood that this work was published at a time when there had been relatively little work done on the mythology of the American Indian, and that some areas had received a great deal more attention than others. Also, Boas was far more familiar with material related to the Northwest Coast than any other areas. Considering this, the results of this table are not to be considered, by any means, conclusive, but they do present some interesting possibilities.

Very few of the myths presented by Boas in this publication refer to a setting. Whether this is characteristic of the myths, or a result of editing is difficult to determine. The deluge myth is one of the few with a direct reference to locale. "The War on the Sky" and "Frog and Antelope" are the only other myths that refer to a specific area. The former occurs on the Kutenai River, the latter on Tobacco Plains. "Frog and Antelope" is interesting as it is prefaced with the statement that the events of the story occured "long ago".

The most prevalent term throughout the myths presented by Boas is tent (tipi?). Close to half of the tales in this volume refer to a tent as the place of residence of one of its characters. While this may apply a relationship to the Plains, several myths contain both a reference to a tent as well as references to things typical of areas ecologically dissimilar to the Plains. "Coyote and Owl" contains several references to baskets (p.37) and "Coyote and Caribou" deals exclu-

sively with fauna found west of the mountains. One myth, "The Youth Who Killed the Chief", refers not only to the tent but also to the travois and to buffalo. However, Boas notes that this is a tale borrowed from the Blackfeet (p.28).

"Coyote and Trout" and "The Two Tsa/hap" are both concerned with fishing but do not appear to be of sufficient age to support the postulate of a provenience in an area where fishing is of economic importance.

In the section of thetext containing the myths presented by Boas there are three that deserve consideration as they are prefaced as having occured "long ago". "Ya.uk^{u}e/$_{i}$ka.m" contains a series of stories all of which occur in a fishing-canoe area (pp.89-109). Similarly, "Coyote and Fox" is a series of seven tales all dealing with salmon (pp.143-161). "Frog and Antelope" is set on the Tobacco Plains but deals with a primarily Plains animal.

In all of the myths presented above there are subtle suggestions that would relate Kutenai culture to certain geographic areas. However, to attempt to draw conclusions from this material is a rather risky process as the investigatorcan never be sure of the length of time the myth has been present in the culture, the alterations it has undergone as it developed, whether it has been accurately related, if it has been borrowed, and from whom, or even whether an over-eager informant made up the story on the spur of the moment. Yet one may infer from sheer number of relationships alone a certain amount of information.

The locations of tribes listed below were derived from Clark Wissler's 1917 edition of the American Indian in which he maps these groups as they were believed to have been situated before 1500.

TABLE 4

TRIBES POSSESSING RELATED MYTHS

Tribe	Location	Number of Related Myths
Achomawi	Northeast California	1
Algonquian	Southeastern Ontario	1
Alsea	Oregon Coast	3
Apache	Eastern New Mexico	6
Arapaho	Northeast Montana	9
Arikara	Western South Dakota	2
Assiniboin	Southeast Saskatchewan	16
Beaver	Eastern British Columbia	4
Bella Bella	Southwest British Columbia	1
Bella Coola	Southwest British Columbia	3
Biloxi	Southern Mississippi	1
Blackfeet	Southern Alberta	21
Caddo	Eastern Texas	12
Cherokee	Western North Carolina	2
Cheyenne	Southeast Montana	7
Chilcotin	Western British Columbia	7
Chinook	Northwest Oregon	9
Chippewa	Southern Ontario	7
Chukchee	Eastern Siberia	2
Commanche	Eastern Wyoming	3
Comox	Southwest British Columbia	3
Coos	Southern Oregon Coast	4
Cora	Northwest Mexico	1
Coeur d'Alene	Northern Idaho	4
Cowichan	Southwest British Columbia	1
Cree	Alberta-Saskatchewan	5
Crow	South Central Montana	5
Dakota	Eastern North Dakota	2
Diegueno	Southwest California	1
Dog Rib	Northwest Territories	3
Eskimo	Northern Alaska and Canada	3
Flathead	Western Montana	2
Fox	Central Wisconsin	2
Gros Ventre	Southeast Alberta	7
Haida	Western British Columbia	2
Hare	Northwest Territories	2
Hidatsa	Central North Dakota	4
Hopi	Eastern Arizona	3
Hupa	Northwest California	3
Huron	Southern Ontario	1
Kalapooya	Northwest Oregon	1
Kaska	Northwest British Columbia	12
Kathlemet	Northwest Oregon	5

TABLE 4 Continued

Tribe	Location	Number of Related Myths
Hato	Northwest California	2
Kickapoo	Eastern Illinois	1
Klameth	Southwest Oregon	1
Koasati	Central Alabama	1
Kwaikiutl	Southwest British Columbia	1
Laguna	Central New Mexico	1
Lilooet	Southern British Columbia	14
Luiseno	Southwest California	6
Maidu	Northeast California	2
Menomenee	Northern Wisconsin	3
Micmac	Nova Scotia	4
Miwok	Central California	1
Modoc	South Central Oregon	1
Natchez	Southwest Mississippi	2
Navajo	Northern Arizona	2
Nez Perce	Northern Idaho	18
Nootka	Vancouver Island	3
Oaxaca	Southern Mexico	1
Ojibwa	Southeast Saskatchewan	8
Okanogan	Southeast British Columbia	18
Omaha	Eastern Nebraska	3
Osage	Southwest Missouri	6
Passamaquoddy	Central Maine	2
Pawnee	Western Nebraska	13
Pend d'Oreilles	Northern Idaho	2
Piegan	North Central Montana	1
Pomo	Western California	1
Ponca	Northern Nebraska	3
Quinault	Northwest Oregon	10
Sanpoil	Northern Washington	10
Seshelt	Vancouver Island	2
Shasta	Northeast California	1
Shoshone	Southern Idaho	25
Shuswap	Southeast British Columbia	41
Sia	Central New Mexico	3
Slavey	Northern Alberta	1
Snohomish	Northeast Washington	1
Songish	Western Washington	1
Squamish	Western Washington	1
Tahltan	Northwest British Columbia	5
Takelma	Southwest Oregon	8
Tarahumare	Northern Mexico	1
Teton	Southwest South Dakota	1
Thompson	Southern British Columbia	43
Tillamook	Northwest Oregon	5

TABLE 4 Continued

Tribe	Location	Number of Related Myths
Tlingit	Northwestern British Columbia	1
Tsimshian	Western British Columbia	4
Tungus	Siberia	1
Ute	East Utah, Colorado	16
Wasco	Southern Washington	3
Wichita	Western Oklahoma	2
Wintum	Northern California	1
Wishosk	Southwest British Columbia	2
Wishram	Northeast Oregon	8
Yana	Northeast California	11
Zuni	Western New Mexico	5

In terms of the hypothesis suggested in the introduction the above table is extremely provocative. British Columbia, and particularly the Thompson and Shuswap tribes easily possess the highest number of related myths. As occupants of areas to the north and west of the Kutenai, and as tribes of the Columbia Plateau, this high quantitative relationship would seem to add a bit of substantiation to the hypothesis. A bit of contradiction is also present, however, as here again there is a significant relationship to a Great Basin group, the Shoshone.

CHAPTER VIII

COMPARISON OF ARCHAEOLOGICAL DATA AND INTERPRETATION

Comparison

The following is an attempt to present a preliminary comparison of archaeological materials recovered from the Kootenai River Basin with those of surrounding areas. Data to be compared was chosen rather arbitrarily, the main criterion being the availability of material. The areas from which the comparitive material was drawn correspond, to some extent, to locations occupied by tribal groups used for comparative data in ethnographic discussions.

The major problem involved in an undertaking of this sort is deciding the nature of material that would best lend itself to comparison. Fir present purposes, projectile points from the Kootenai will be the primary items of comparison. The previously delineated typology will be used for both Kootenai and comparative material.

Two other archaeological surveys have been conducted in this area, Shiner (1950) and Borden (1956). The former was only a preliminary survey that recorded very few artifacts and no projectile points, and will not be utilized here. The latter was a survey conducted on the Canadian portion of the Upper Kootenai that yielded similar results to the present survey. Borden's material will be combined with other data to be used in comparisons.

Another problem that presents itself in a comparative archaeolog-

ical study of this type is the difficulty in determining which material from the area can be classified as having been deposited by the Kutenai Indians. Borden deals with the problem by assuming that material deposited in areas known to have been occupied by the Kutenai should have come from the Kutenai. He substantiates this with evidence that there is a notable stylistic change between cultural debris in the locale of the Kutenai Indians and in the locale of the geographically contiguous Shuswap (1956:89). To further substantiate this claim we may examine material recovered during the excavation of the Fisher River Site (Taylor 1968). This site is located on the Kutenai River a short distance south of the site of Libby Dam. There is a substantial amount of historical and ethnographic data related to this site that assures us that the site was occupied by the Kutenai Indians. Using this as a control, we may determine that very few of the projectile point types salvaged during the survey do not occur at the Fisher River Site. Other ethnographic data dealing with the Kutenai Indians in general has also been used to support Borden's conviction concerning projectile point types. For instance the International Boundary Site (517) yielded, among other artifacts, a pipe, net weights, ground stone implements, and roasting pits, all of which are described as Kutenai traits. Thus we may assume that on the basis of Borden's assertion, evidence from the Fisher River Site, and ethnographic evidence, that material salvaged from the Kootenai River area should have been deposited by the Kutenai Indians. Admittedly, this does not necessarily have to be the case, and for this reason, no similarities that appear as a result of comparison are deemed conclusive.

In Table 5 attention is paid primarily to the similarity of propotions of projectile points rather than actual number. Also the absence

TABLE 5

COMPARISON OF PROJECTILE POINT TYPES

Type Area	Koot	BC	NWT	Alb	Mon	Wyo	Uta	Nev	Ida	Wash&Ore
NAa	2	3				1	8	6	1	33
NAb1	2	2	2	1	1	12	5	5		194
NAb2	3	5	10		3	48	19	7	3	19
NAb3		1	3	4	3	4	32	22	2	9
NBa	9	9	3	2	21	7	33	16	11	151
NBa1	28	14		258	56	21			22	3
NBb	13	1		1	2	2	26	17	2	17
NBb1	16	3	1	32	53	13	65	15	12	10
NBb2										31
NBc		2				1	12	4	10	75
NC										2
ND						3				
SAa		2					4	11		95
SAb						4				29
SAc		1					16			26
SBa	8	2		4	3	3	1	4	4	206
SBb	1	1					26	6	27	263
SBc	1	1				3	2		4	30
SCa1	14		6	39	10	8	3	9	36	41
SCa2	26	8	13	230	67	58	87	1	9	52
SCa3	26	3	4	60	29	58	62	39	9	32
SCb1	25	1		1	30	33	70	1		37
SCb2	9	2	1	1	66	23	47	3	27	109
SCb3	1	1			1	6	65			20
SCc		1				2				5
Total Points	184	65	43	632	355	310	579	166	185	1493

Explanation of Abbreviations and Sources Utilized:

Koot. Kootenai River, Borden (1956), data reported herein.
BC. British Columbia, Smith (1900a,1900b), Sanger (1964).
NWT. Northwest Territories, MacNeish (1950,1953).
Alb. Alberta, Wormington and Forbis (1965), Forbis (1962).
Mon. Montana, Davis and Stallcopp (1965), Forbis (1950), Loendorf (1967) Mulloy (1958).
Wyo. Wyoming, Taylor (1964), Sharrock (1966).
Uta. Utah, Aikens (1965), Jennings (1957), Taylor (1957).
Nev. Nevada, Williams and Orlin (1963), Shutler and Shutler (1963), Susia (1964).
Ida. Idaho, Gruhn (1961), Lynch et al. (1965).
Wash&Ore. Washington and Oregon, Collier et al. (1942), Smith (1950), Strong et al. (1930).

of a type prevalent on the Kootenai or the presence of a type absent on the Kootenai will be considered. The samples that have been used for comparison are from sites or areas that vary in degree of productivity and in the amount of work done by archaeologists, thus there are some samples that are far more numerous than others.

Interpretation

The distribution of projectile point types presented above has one major fault. This is related to the typology that was used. In some areas projectile points classified as the same type as those of the Kootenai River demonstrated obvious dissimilarities. Still, it was felt necessary to utilize the entire sample for each area even at the risk of including in a particular type a point not present on the Kootenai. However, a typology of some sort must be used and no typology is useful in every area. The Strong typology is only slightly unwieldy for the Kootenai and works quite well in most other areas examined.

Another problem encountered in the use of this typology was related to areas in which a different typology was used for the described data. Often these reports would illustrate a single prototype for the particular projectile point under discussion. The nature of the illustration would be the basis for deciding how this type would fit into our typology. However, it is possible that the typology in the report bases its distinctions on different attributes than does our typology. When this is the case, one can only assume that the number of artifacts reported as a specific type are alike in their attributes as the prototype and that there are not differences in such characteristics as the nature of the base or shoulders. Differences that might be meaningless on the basis of their typology but crucial to our typology. This problem

could not be effectively dealt with within the scope of this study. Either site reports using the same typology would have to be utilized or site reports that illustrate every projectile point recovered.

In using any artifact typology there is a certain amount of subjectivity involved in classifying specimens. Often a particular point would fit easily into two different types. To prevent any serious discrepancy arising because of this, even reports using the same typology were approached as if they had to undergo the same typological alterations as those using different or no typologies. In this manner if a particular projectile point from the Kootenai is incorrectly typed, than all comparative points are in the same situation. Thus the distribution may still be meaningful.

A final major problem associated with the present comparison should be mentioned. Some of the areas used for comparison had undergone extensive archaeological work because they had yielded "early man" sites. As far as we can determine there is no material of sufficient age on the Kootenai to fall into this category. Yet there are projectile points or blades that fit into the types most characteristic of these early sites, the NA series. The frequency of the Kootenai NA artifacts is bound to be less than it is in other areas that have been investigated with the objective of collecting these early points. The problem involved is that any proportions of different types are bound to be distorted in terms of the present study. But other artifacts in these areas do exist that are in the NA series and that are not particularly old, as is the case in the Kootenai. This problem becomes even more obvious with artifacts from the Meso-Indian period (Wormington and Forbis 1965: 29) as they are more common and fit into a variety of types. This occurs

even with the Kootenai artifacts. There are examples in the SBa and SCa3 types that are characteristic, respectively, of Duncan and Oxbow points. Both of these types are significantly older than other associated artifacts. To include these in the comparison is likely to distort the sample, yet they must be included , and they must be included for all areas.

A subjective appraisal of thecomparisons attempted above would have to choose Nevada as the area of highest archaeological similarity. this is quite obviously contradicted by the chart where an absence of the projectile point type most most common on the Kootenai, the side notched, is demonstrated. This might be explained by noting that the side notched point is believed to be a fairly recent development on the Plains. From this one might postulate that these points were adopted by the Kutenai at a late date after Plains contacts became more frequent and that before this the types common to the Kootenai River and Nevada obtained. The question that would logically follow is "Did the Kutenai arrive at their present locale from Nevada?" or "Did the people using these points in Nevada come from the same area as the Kutenai now occupy or that they originally occupied?". Although this is only a subjective interpretation some credence might be lent to it when considering other cultural relationships existing between these two areas. A perusal of Table 5 indicates that Montana and Wyoming are actually the areas most typologically similar as far as proportions are concerned.

In examining the various archaeological studies from different areas certain similarities and dissimilarities should be noted. It is interesting that side notched projectile points found in several buffalo jumps on the Plains are very similar to those found on the

Kootenai. However the remainder of points found in these buffalo jumps do not coincide with those on the Kootenai. If we assume these side notched points were used by the Kutenai on the Kootenai River, we might postulate that the Kutenai used the buffalo jumps in which some of these points are found. We know the Kutenai were on the Plains hunting buffalo and there is ethnographic and linguistic evidence that they used buffalo jumps. We may also be fairly certain the Kutenai used side notched projectile points. They are the dominant type on the Kootenai River, they are the dominant type on the Fisher River Site, and these points are found in the Flathead Lake area, the last home of the Kootenai (Lawrence 1953, Malouf 1956a, 1956b, Thomas 1953, White 1953,1959).

There are some areas such as Idaho, Washington, and Oregon, where striking similarities to the Kootenai River collection exist, e.g., Cruhn (1961). However, in these same areas there are point types that are entirely absent on the Kootenai. It is suprising that the material reported by Miller (1959) in an area of Idaho frequented by the Kutenai is more dissimilar to the Kootenai River material than is material from more distant areas in Idaho.

There seem to be some similarities between the Kootenai and Central British Columbia and few dissimilarities. However there are point types in each area that are absent in the other. This is also the case with sites in the Northwest Territory area although here the absence of particular point types is even more marked.

South of the Kootenai, as previously mentioned Nevada is most similar. Utah appears to have representations of almost all Kootenai point types but also has many that are not present on the Kootenai. Wyoming has less similar artifacts to the Kootenai than does Utah but has far less

dissimilar artifacts.

The primary job of an archaeologist, after he collects his data, is to reconstruct the way of life of the people who occupied the area in which he is working. In the light of the present problem this is an essential operation. If the prehistoric lifeway of the area coincides or doesn't flatly contradict the ethnographic data it will provide further evidence to support the contention that the archaeological remains of the Kootenai River have been deposited by the Kutenai Indians. It is understood that this in itself is not sufficient evidence to establish a definite relationship as there are only certain means of exploiting a particular environment.

On the basis of our collection one might infer that the area was inhabited by a group practicing primarily hunting activities. The most plentiful artifacts found in the area were projectile points, scrapers, and knives. Fire hearths such as those found on 24LN502 were replete with burned and split bone. Individual hunting would leave artifacts in areas in which there is no evidence of occupation such as the two unaccompanied projectile points found on 24LN505.

There was evidence of vegetable materials also having been used although to a much lesser extent than were meat products. One mortar and several pestals were found. There were also pestals in the possession of local residents. Some of the fire pits excavated on 24LN517 were entirely devoid of evidence of bone. This might indicate the pits were used in the preparation of vegetable matter.

The above brief description of my interpretation of the subsistence of the peoples occupying the Kootenai River as understood from the archaeological data would indicate a society in which hunting was the

primary activity but which also practiced the exploitation of the flora of the area. This would seem to coincide with the description of the subsistence activites of the Upper Kutenai. The only item left out was fishing and there is limited evidence of this activity in the form of net weights found on 24LN517.

It is more difficult to attempt inferences from archaeological data in relation to social organization. Even for this aspect of Kutenai culture, however, one might project some of the archaeological evidence into the ethnographic data. The size of the sites reveal a bit of information concerning the people that occupied them. In most cases sites on the Kootenai were small and would appear to have been occupied by little more than a family group. Some sites such as 24LN502, 24LN503, 24LN509, 24LN513, and 24LN517, however, were relatively large and apparently were occupied by more people at one time or are the results of several reoccupations. If the Kutenai did, as ethnographic evidence indicates, live in bands of approximately one hundred individuals in the more hospitable seasons of the year, and break down into small family groups camping along the river during the harsher winter months, one might suggest that the archaeological and ethnographic evidence coincide.

The easiest aspect of Kootenai culture to relate to archaeology is their material culture. Artifacts and features found by the Kootenai survey crew include points, knives, scrapers, drills, mortars, pestals, mauls, trade items, pipes, cooking pits, possible tipi rings, net weights, and horn implements. All of these are described as having been possessed by the Kutenai in earlier chapters. Some items described were not located by the survey. Sweat baths, stone axes, arrow straighteners, fish hooks and spears, bone tools, pit dwellings, camas pits, and pottery

(although there is a great deal of doubt as to its existence , Griffin, 1965) were among non-perishable items of material culture that were not found. That these were absent on the Kootenai is not contradictory evidence to the postulate that these are Kootenai sites, as we know the Kutenai used these implements and we know they occupied the river area. If the items are absent it must be ascribed to coincidence. If the converse were the case and material was found that was not previously described as possessed by the Kutenai, there would be more reason for doubt.

Assuming then that there is reason to believe that the Kootenai River sites were occupied by the Kutenai Indians and that archaeological comparisons to other areas are valid, what have the comparisons told us concerning the question of the provenience of the Kutenai? That Kutenai point types are present on the Plains can be explained as subsequent to the buffalo hunts. That they are present on the Plateau may be similarly explained as a result of Kutenai trips onto the Plateau. The relationship to the Great Basin is, to this investigator, the most provocative. Similarities exist in archaeological remains, social organization traits, and in mythological and religious aspects. While it is granted that there are vast dissimilarities, positive evidence is more marked to this area than any other.

As far as the hypothesis, that the Kutenai are a Plateau and not a Plains group, is concerned, the evidence presented in this thesis lends a certain amount of support. There are many similarities among items of material culture other than projectile points. The Kutenai canoe, for instance, is seen by Ray as typical of the Plateau. Similarly the sweat bath while similar to the Plains, most resembles that of the Nez Perce (Walker 1966).

Evidence in the chapter dealing with subsistence provided a bit less support for the hypothesis. However there was some evidence of relationships to the north and northwest. There was also some similarity noted to the Great Basin. Since we are dealing with the Upper Kutenai primarily, a lack of related subsistence practices to the Plateau may simply be the result of a deemphasis of fishing activities in favor of the Buffalo hunt.

In social organization, while there are more relationships to the Great Basin, there are also strong similarities to the north and west of the Kootenai River. Yet in reading Ray's material (1945,1939) one is compelled to note primarily a lack of related traits of social organization between the Kutenai and Plateau tribes.

Kutenai religious practices are quite similar to those present on the Plateau. Those that are dissimilar are either unique to the Kutenai or appear to be diffused from the Plains.

Perhaps the strongest support for the hypothesis comes from the data dealing with Kutenai mythology. Here the relationship is unquestionably strongest to the area to the north and west of the present Kutenai locale. In this aspect of Kutenai culture relationships can be seen both in comparative data and within the subject matter itself. Numerous Kutenai myths are situated on the Plateau, often in areas of the Plateau not traditionally frequented by the Kutenai. Those that do not explicitly state a setting often deal with Plateau flora and fauna.

Unfortunately, in terms of the hypothesis, the area in which the most extensive comparisons were made, archaeology, failed to provide support. The dissimilarities noted far outweighed the similarities. However, that there are similarities is important. The dissimilarities

may be explained by other people inhabiting the area, the similarities could indicate some sort of relationship.

The hypothesis then has been subjected to its initial test. While some support was seen it was certainly not verified. Another hypothesis may have been given an equal if not superior amount of substantiation. Such is the nature of the problem that was the subject of this thesis. One does not just look for similarities to determine the place of origin of a particular group because some similarities will exist everywhere. However, if the resolution of the question of the provenience of the Kutenai is deemed important, and I consider it of extreme ethnological importance, whatever means of investigation that is available should be utilized. Considering the present state of data concerning the Kutenai the techniques used in this thesis seemed most appropriate. If they did not resolve the question, they at least provided clues as to areas in which more intensive comparative work should be done.

Recommendations for Further Work

Before definite conclusions may be drawn, comparisons must be made to a number of areas and they must be rigorously controlled. Ethnographic comparisons must be attempted only with tribes for which there is adequate prehistoric data. Changes in the culture must be understood. A means must be developed to render the data for the Kutenai as well as the other tribes easily comparable. In some instance, such as social organization, mythology, and linguistics , comparisons may be attempted on a structural basis as described by Levi-Strauss (1963). However, subsistence, religion, and material culture have to be compared on a lower level of abstraction . All comparisons must be subject to some form of statistical verification.

REFERENCES

Anonymous
1961 American Heritage Book of Indians. American Heritage Publishing Company.

Aikens, Melvin C.
1965 "Excavation in Southwestern Utah", Anthropological Papers, No. 76. University of Utah, Salt Lake City.

Arthur George W.
1962 "The Emigrant Bison Drives of Paradise Valley, Montana", Montana Archaeological Society, Memoir, No. 1.

Baker, Paul E.
1955 The Forgotten Kutenai. Mountain States Press, Boise, Idaho.

Barnett, H.G.
1939a "Culture Element Distributions: VII Oregon Coast", Anthropological Records, Vol. 1, No. 3. University of California Press, Berkeley.

1939b "Culture Element Distributions: VI Gulf of Georgia Salish", Anthropological Records, Vol 1, No. 5. University of California Press, Berkeley.

Birket-Smith, Kaj and Frederica DeLaguna
1938 The Eyak Indians of the Copper River Delta, Alaska. Levin and Munksgaard, Kobenhavn.

Boas, Franz
1890 "The Indians of British Columbia", Report of the British Association for the Advancement of Science, 797-893. London.

1918 "Kutenai Tales", Bulletin of the Bureau of American Ethnology, 59. Washington, D.C.

1919 "Kinship Terms of the Kutenai Indians", American Anthropologist, Vol. 21, 98-101.

Borden, Charles E.
1956 "Two Surveys in the East Kootenay Region", Research Studies of the State College of Washington, XXIV, No. 1. Pullman.

Chamberlain, Alexander F.
1892 "Report on the Kootenay Indians", Report of the British Association for the Advancement of Science, LXII. London.

1901 "Kutenai Group Drawings", American Anthropologist, III, 248.

1902a "Earlier and Later Kootenay Onomatology", American Anthropologist, IV, 229-236.

1902b "Geographic Terms of Kootenay Origin", American Anthropologist, IV, 348-350.

1905 "The Kootenay Indians", Annual Archaeological Report. Toronto.

Clark, Ella E.
1966 Indian Legends from the Northern Rockies. University of Oklahoma Press, Norman.

Collier, D., A. Hudson, and A. Ford.
1942 "Archaeology of the Upper Columbia Region", University of Washington Publications in Anthropology, Vol IX, No. 1.

Coues, Eliot
1897 Henry-Thompson Journals, Vol. II, 703-705. New York.

Coult, Allan D. and Robert W. Habenstein
1965 Cross Tabulation of Murdock's World Ethnographic Sample. Columbia, University of Missouri.

Curtis, Edward S.
1911 The North American Indian, Vol. VII. Cambridge.

Davis, L. and F. Stallcopp
1965 "The Keaster Site", Montana Archaeological Society, Memoir 2.

Daugherty, Richard D.
1952 "Archaeological Investigations in O'Sullivan Resevoir, Grant County, Washington", American Antiquity, XVII, No. 4.

1956 "Archaeology of the Lind Coulee Site, Washington", Proceedings of the American Philisophical Society, Vol. 100, No. 3.

Driver, Harold
1939 "Culture Element Distribution: X Northwest California", Anthropological Records. University of California Press.

Drucker, Phillip
1963 Indians of the Northwest Coast. Garden City, N.Y.

Forbis, Richard G.
1950 "Archaeological Data from Gates of the Mountains", Anthropology and Sociology Papers, No. 1. Missoula, Montana.

1962 "The Old Woman's Buffalo Jump, Alberta", National Museum of Canada Bulletin, 180.

Gifford, E.W.
1941 "Culture Element Distributions: XII Apache-Pueblo", Anthropological Records. University of California Press, Berkeley.

Graham, Clara
1945 Fur and Gold in the Kootenays. Wrigley Printing Co., Vancouver.

Griffen, James B.
1965 "Prehistoric Pottery From Southeastern Alberta", An Introduction to the Archaeology of Alberta Canada. Denver Museum of Natural History, No. 11.

Gruhn, Ruth
1961 "A Collection of Artifacts From Pence-Dueriq Cave in South-Central Idaho", Tebiwa, Vol. IV, No. 1. Pocatello.

Hodge, Francis W.
1907 "Handbook of American Indians North of Mexico", Bulletin of the Bureau of American Ethnology, 30. Washington D.C.

Hoffman, W.J.
1886 "Vocabulary of the Selish Language", Proceedings of the American Philisophical Society, XXIII.

Hyde, George E.
1959 Indians of the High Plains. University of Oklahoma Press.

Jennings, Jesse D.
1957 "Danger Cave", Anthropological Papers, No. 27. University of Utah. Salt Lake City.

Jenness, Diamond
1955 Indians of Canada. National Museum of Canada, Ottawa.

Johnson, Olga
1950 Tobacco Plains Country. Caxton Printers, Caldwell, Idaho.

Kissell, Mary Lois
1909 "A Kutenai Berry Basket", American Anthropologist, XI.

La Farge, Oliver
1956 A Pictorial History of the American Indian. Crown Publishers, Inc., New York.

Lawrence, J.E.
1953 "Lithic Specimens From Dayton Montana (23LA2)", Anthropology and Sociology Papers, No. 15. Missoula, Montana.

Levi-Strauss, Claude
1967 Structural Anthropology. Anchor Books, Garden City, New York.

Lewis, Oscar
1942 The Effects of White Contact Upon Blackfoot Culture. Monographs of the American Ethnological Society. New York.

Linderman, Frank B.
1926 Kutenai Why Stories. Blue Ribbon Books Inc. New York.

Lowie, Robert H.
1963 Indians of the Plains. The Natural History Press. Garden City.

Loendorf, Larry L.
1967 A Preliminary Archaeological Survey of the Clark Fork River, Carbon County, Montana. MA Thesis. University of Montana.

1968 "Stone Chipping", handout for Primitive Technology. Missoula.

Lynch, T.F. and L. Olsen
1964 "The Columbet Creek Rockshelter", Tebiwa, Vol. 2, No. 2.

Lynch, T.F., K.S. Wilkinson and C.N. Warren
1965 "Archaeological Investigations at Bruce's Eddy", Tebiwa, Vol. 8, No. 2.

Maclean, John
1896 Canadian Savage Folk. William Briggs. Toronto.

MacNeish, Richard S.
1951 "An Archaeological Reconnaissance in the Northwest Territories", National Museum of Canada Bulletin, 123.

1953 "An Archaeological Reconnaissance in the Mackenzie River Drainage", National Museum of Canada Bulletin, 128.

Malouf, Carling I.
1952 Economy and Land Use by the Indians of Western Montana, U.S.A. Missoula, Montana.

1953 "A Kutenai Calendar Record", Montana Magazine of History.

1956a The Cultural Connections Between the Prehistoric Inhabitants of the Upper Missouri and Columbia River Systems. Doctoral Dissertation, Columbia University.

1956b "Montana Western Region", Research Studies of the State College of Washington, Vol XXIV, No. 1. Pullman.

1962 "Notes on the Logan Buffalo Jump", Montana Archaeological Society Memoir, No. 1.

1967 "Historic Tribes and Archaeology", Archaeology in Montana, Vol. 8, No. 1.

(no date) Unpublished manuscript.

Malouf, Carling I.and Thain White
1953 "The Origin of Pictographs on Flathead Lake", Anthropology and Sociology Papers, No. 15. University of Montana, Missoula.

(no date a) "Kutenai Message Service", Flathead Lake Lookout Museum, No. 1. Lakeside, Montana.

(no date b) "Recollections of Lasso Stasso", Flathead Lake Lookout Museum, No. 3, Lakeside, Montana.

Mason, Otis T.
1899 "Pointed Bark Canoes of the Kutenai and Amur", Report, U.S. National Museum. Washington D.C.

Merk, Frederick
1931 Fur Trade and Empire; George Simpson's Journal. Harvard University Press, Cambridge.

Mill, J.E. and C. Osborne
1952 "Material Culture of a Coulee Rockshelter", American Antiquity, XVII, No. 4.

Miller, Carl F.
1963 "Archaeological Manifestations in the Toole County Section of the Tiber Resevoir Basin, Montana", Bureau of American Ethnology Bulletin, 185.

Miller, Tom
1959 "Archaeological Survey of Kootenai County, Northern Idaho", Tebiwa, Vol. 2, No. 2. Pocatello.

Mooney, J.E.
1928 "The Aboriginal Population of America North of Mexico", Smithsonian Miscellaneous Collections, Vol. 80, No. 7.

Morgan, Lewis Henry
1871 "Systems of Consanguinity and Affinity", Smithsonian Contributions to Knowledge, XVII. Washington D.C.

Mulloy, William
1958 "A Preliminary Prehistoric Outline for the Northwest Plains", University of Wyoming Publications, Vol. XXII, No. 1, Laramie.

Murdock, George Peter
1949 Social Structure. The Macmillan Co., New York.

Osborne, Alan B.
1961 "The Sheep Island Site and the Mid-Columbia Valley", Bureau of American Ethnology Bulletin, 179.

Ray, Verne
1939 "Cultural Relations in the Plateau of Northwestern America", Frederick Webb Hodge Anniversary Publication Fund, III.

1945 "Culture Element Distributions:XXIJ Plateau", Anthropological Records. University of California Press, Berkeley.

Sanger, David
1964 "Excavations at Nesikep Creek", National Museum of Canada Bulletin, 193. Ottawa.

Sapir, Edward
1918 "Kinship Terms of the Kootenay Indians", American Anthropologist, XX, 414-418.

1949 "Time Perspective in Aboriginal American Culture", Selected Writings of Edward Sapir, ed. D. Mandelbaum, University of Chicago Press.

Schaeffer, Claude E.
1940 The Subsistence Quest of the Kutenai. Doctoral Dissertation. University of Pennsylvania. Philadelphia.

1949 "Wolf and Two-Pointed Buck: A Lower Kutenai Tale of the Supernatural Period", Primitive Man, XXII, Nos. 1 and 2.

1966a Bear Ceremonialism of the Kutenai Indians. Museum of the Plains Indian, Browning, Montana.

1966b LeBlanc and LeGasse Predecessors of David Thompson in the Columbia Plateau. Museum of the Plains Indian, Browning.

Sharrock, Floyd W.
1966 "Prehistoric Occupation Patterns in Southwestern Wyoming and Cultural Relationships With the Great Basin and Plains Culture Areas", Anthropological Papers, No. 78. University of Utah, Salt Lake City.

Shiner, Joel
1950 "Archaeological Resources in the Libby and Ratka Resevoirs, Northern Idaho and Northwestern Montana", Columbia Basin Project, River Basin Surveys. Smithsonian Institution.

1961 "The McNary Resevoir", Bureau of American Ethnology Bulletin,185.

Shumate, Maynard
1967a "The Carter Ferry Buffalo Kill", Archaeology in Montana, Vol. 9, No. 1.

1967b "The Taft Hill Buffalo Jump", Archaeology in Montana, Vol 8, No.4.

Shusky, Ernest L.
1965 Manual For Kinship Analysis. Holt, Rinehart and Winston, N.Y.

Shutler, Mary E. and Richard Jr.
1963 "Deer Creek Cave", Anthropological Papers, No. 11, The Nevada State Museum, Carson City.

Simpson, Sir George
1847 An Overland Journey Round the World, Lea and Blanchard, Philadelphia.

Smith, Harlan I.
1900a "The Archaeology of Lytton, British Columbia", Memoirs of the American Museum of Natural History, Vol. II, Part III.

1900b "Archaeology of the Thompson River Region, British Columbia", Memoirs of the American Museum of Natural History, Vol. 2, Part VII.

Smith, Marion W.
1950 "Archaeology of the Columbia-Fraser Region", American Antiquity, Vol. XV, No. 4, Part 2.

Spry, Irene M.
1963 The Palliser Expedition. The Macmillan Company of Canada Limited, Toronto.

Steward, Julian
1941 "Culture Element Distribution: XIII Nevada Shoshone", Anthropological Records, University of California Press, Berkeley.

1945 "Culture Element Distributions: XXIII Northern and Gosiute Shoshone", Anthropological Records, University of California Press, Berkeley.

Stewart, Omer
1941 "Culture Element Distributions: Northern Paiute" Anthropological Records, Vol. 4, No. 3, University of California Press, Berkeley.

Strong, William Duncan
1935 "An Introduction to Nebraska Archaeology", Smithsonian Miscellaneous Collections, Vol. 93, No. 10. Washington D.C.

Strong W.D., W.E. Schenck, and J. Steward
1930 "Archaeology of the Dalles-Deschutes Region", University of California Publications in American Archaeology and Ethnology, Vol. 29. Berkeley.

Susia, Margaret L.
1964 "Tule Springs Archaeological Surface Survey", Anthropological Papers, No. 12. The Nevada State Museum, Carson City.

Swadesh, Morris
1949 "The Linguistic Approach to Salish Prehistory", Indians of The Urban Northwest, ed. Marion Smith. New York.

Taylor, Dee C.
1957 "Two Freemont Sites and Their Position in Southwestern Prehistory", Anthropological Papers, No. 29. University of Utah, Salt Lake City.

1964 "Preliminary Archaeological Investigation in Yellowstone National Park", Report for the National Park Service, Missoula, Montana.

1968 "Salvage Excavations at the Fisher River Site", Bureau of Public Roads, Department of Commerce, Portland.

Teit, James
1930a "The Salishan Tribes of the Western Plateau", Forty-Fifth Annual Report of the Bureau of American Ethnology. Washington D.C.

1930b "Traditions and Information Regarding the Tona'xa", American Anthropologist, XXXII, 625-632.

Thomas, C. and N.
1953 "Lithic Specimens From the Shoreline at Dayton (24LA2)", Anthropology and Sociology Papers, No. 15. University of Montana, Missoula.

Tro, Roger P. and Louise C.
1968 "The Lost Horse and Elbow Lake Occupation Sites", Archaeology in Montana, Vol. 9, No. 1.

Tuohy, D.R. and E.H. Swanson
1960 "Excavations at Rockshelter 10-AA-15, Southwestern Idaho", Tebiwa, Vol. 3, No. 1, Pocatello.

Turney-High, Harry Holbert
1941 "Ethnography of the Kutenai", Memoirs of the American Anthropological Association, No. 56.

Walker, Deward E. Jr.
1966 "The Nez Perce Sweat Bath Complex: an Acculturational Analysis", Southwestern Journal of Anthropology, Vol. 22, No. 2, Alberquerque.

White, Thain
1952 "Kutenai Pipes", Western Anthropology, No. 1, Missoula, Montana.

1953 "An Archaeological Site at Swan Lake", Anthropology and Sociology Papers, No. 15, University of Montana, Missoula.

1959 "Tipi Rings in the Flathead Lake Area, Western Montana", Anthropology and Sociology Papers, No. 19, University of Montana, Missoula, Montana.

Williams, Pete A. and Robert I. Orlin
1963 "The Corn Creek Dunes Site", Anthropological Papers, No. 10. The Nevada State Museum, Carson City.

Wissler, Clark
1917 The American Indian, Douglas C. McMurtie. New York.

Wormington, H.M. and Richard G. Forbis
1965 An Introduction to the Archaeology of Alberta Canada. Denver Museum of Natural History, No. 11.